NEXUS

NEW TIMES MAGAZINE

Volume 2, Number 26 JUNE - JULY 1995

PO Box 30, Mapleton Qld 4560, Australia

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NEXUS NEW TIMES

Volume 2, Number 26

JUNE - JULY 1995

PUBLISHED BY

Pyoquip Pty Ltd, ACN #003 611 434

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STATEMENT OF PURPOSE

Nexus recognises that humanity is undergoing a massive transformation. With this in mind, Nexus seeks to provide 'hard-to-get' information, so as to assist people through these changes.

Nexus is not linked to any religious, philosophical, or political ideology or organisation.

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PRINTING

Warwick Daily News, Queensland, Australia

AUSTRALIAN DISTRIBUTION

Newsagents Direct Distribution

NEW ZEALAND DISTRIBUTION

Network Distribution

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Editorial

What a couple of months that was! Is it just me or is the pace of life itself increasing?

First up, we had the NEXUS Conference in Sydney during March. Over 250 people from all over Australia and New Zealand attended the successful two-day event. For those who missed it, videotapes and some audiotapes are to be made available. (See ad on page 35 for more details.)

Hot on the heels of the Conference, we decided to change our computer system (from PC's to Macintosh). This meant an entire new database structure that also required a user-friendly interface. Another two weeks...

Then came the Oklahoma bombing. Is that bomb changing the way things go down in America, or what? Do you realise, for example, that having read this far into NEXUS you are now a right-wing extremist? In Australia, this sort of logic (i.e., guilt by association) was applied during a smear campaign against NEXUS by journalists associated with the Australia-Israel Review. Of course, their campaign to convince the nation that a NEXUS-inspired movement was about to blow up Australia had nothing to do with the fact that the Racial Vilification Bill is likely to be rejected by the Senate due to lack of support!

I would like to thank our many readers who faxed or mailed us clippings about NEXUS from their local papers. Rather than attempt to publicly defend NEXUS—and maybe get an apology from the papers printed on page 183 (if we're lucky)—we are continuing to expand. Our readership is growing at an enormous pace, and I expect this will continue to attract all sorts of attention.

All this interest has strengthened our resolve to build the new—not fight the old. The 'old' is dying, decaying from corruption within, on all levels. I can only hope that we learn well the lessons of blindly trusting the endless parade of 'experts' trotted out to explain what is real and what isn't, whether it be in politics, science, medicine, history or the personal. If the 'experts' are so smart, why is the planet in such a mess?

This is the information age. You don't have to rely on 'experts' any more. You can find things out for yourself and draw your own conclusions!

Computer information networks are, and will be more so, the 'backbone' of the information 'body'. When governments move to regulate computer networks, regardless of the excuse, it will be purely a move to stop the people finding 'undesirable' information for themselves. And they are already working on these proposals, thanks to the Oklahoma bombing.

The information explosion has resulted in more public conferences and private newsletters. To this end, I would like to draw your attention to the World Congress on Cancer (see ad on page 36), an event you should advise your doctor to attend. I would also like you to note the launch of a newsletter by well-known author and lecturer, Stan Deyo. (You won't believe it, but I really had to talk Stan into this!) We will be feeding Stan some of our NEXUS information overflow, so, combined with the info network Stan already has in place, you are guaranteed some very juicy reading. For more information, see the ad on page 35.

Thanks also to our NEXUS UK readers who rang W. H. Smith stores asking them to stock NEXUS. Keep it up!

Until next time...

Duncan

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Letters to the Editor ...

Re: Alleged Alien Alloy

Dear Editor: I was struck by comments in the article, "The Harmonic Conquest of Space" by Bruce Cathie in NEXUS vol 2#22. It was stated that a space-time vehicle constructed on the principles of harmonics would have to be constructed of an alloy containing the entire range of 144 elements in the theoretical atomic table, and that such an alloy is no doubt a physical impossibility.

I would like to point out that the metal sample of UFO ship skin that was obtained by Eduard Meier in Switzerland in the 1970s was exactly such an alloy. This sample was analyzed by Marcel Vogel of IBM, and contained discrete microscopic crystals of every known element. Each element was identifiable, as opposed to an alloy that we might make by melting the components together, where all elements become mixed and unrecognizable. It was stated that we do not have the technology to fabricate a sample such as this.

As far as I know, the Meier sightings, movies, sound recordings and the sample are legitimate. The sample has disappeared, but the video of the actual analysis remains.

There were three videos: "The Meier Chronicles", "The Movie Footage" and "The Metal" which documented the Meier sightings. At one time, these videos were available from ESPN Home Video, and are also marked INTERCEP, Drawer JJ, Munds Park, AZ 86017.

Sincerely, George N., Bolivar, OH, USA.

Re: Gravity Rules KO'd!

Dear Editor: I bring your attention to the observation that the Newtonian definition of gravity as directly proportional to the sum of the masses and inversely proportional to the square of the distance, is one of effect and not cause.

The cause of the gravity we experience is the state of structuring of the solar system within the motion of the Milky Way galaxy. Gravity is a product of galaxy formation and ongoing structuring and, therefore, not a universal constant.

This gives rise to the observation that gravity is not uniform over space or time, and that the reason the Moon is moving away from the Earth is that we are in a period of relatively decreasing gravity effect.

This observation has far-reaching ramifications for cosmology, not the least of which is the demise of the Big Bang theory...

This matter has been overlooked by the physics establishment because of the assumption that gravity is simply caused by the sum of the masses, its acceptance of energy as a 'thing-in-itself', and the treatment of the 'forces' of physics as uncaused and disconnected phenomena.

Yours, Stephen Mooney Danns Road, Harcourt, Victoria 3453, Australia.

Re: 'ULF War Syndrome'

Dear Duncan: While reading a back issue of NEXUS (vol. 2#20), I came across a news clip titled "The Mysterious Taos Hum". It says that Representative Bill Richardson (Dem., NM) has asked the House Select Committee to investigate a noise which causes dizziness, shortness of breath, headaches, anxiety and sleeplessness, and is thought by some to be from a secret defence-related project plaguing various cities in New Mexico.

WeII, I believe I know something about that sound, so here is my story.

During the years 1980-83 I was living with the daughter of the now-deceased Dr David Fraser, former head of the Department of Toxicology at the University of North Carolina, Chapel Hill. One day the daughter told me of a frightening encounter her father had with the American military. Later, when Dr Fraser came to stay with us while on vacation in 1981, I asked him to tell me the story firsthand.

In the early 1970s, the small city of Medford, Oregon, became the suicide capital of the United States overnight. (The exact dates can be found by checking national health statistics.) After Dr Fraser was notified of this dramatic anomaly, he organized and sent a team of researchers to look for the

cause. They checked the water, ! the air, the soil and a variety of additional possibilities, but still could find no reason for the massive increase in suicides. Then they discovered that Ultra Low Frequencies were being beamed into Medford, Oregon, from the 'local' military base. (I never thought to ask for the name.) The researchers then went to that military base and met with its commanding officer. The commanding officer said he knew about the ULF, but his base was not responsible, and that the Russians were! The ULF waves stopped the very next day.

The researchers had not only determined the military base as the source, they also determined that the ULF was coming into the homes of the populace through their television antennas, which created some sort of standing wave resonance within the structure of the home itself. Those people who did not get out of their homes became severely depressed.

As the ULF wave had now stopped, the researchers returned to the University of Chapel Hill to write their report and confer with Dr Fraser. At that time, a number of men appeared who displayed CIA credentials and said the ULF waves beamed into Medford were a "national security" matter. They went on to threaten explicitly to kill each of the researchers, including Dr David Fraser himself, should anyone speak further about it.

As a postscript, I have often wondered how many times rescarchers have stumbled over the effects of sccrct weapons directed against the American people and have been intimidated into silence, or possibly murdered. I myself have made no public statement on the matter until now, fourteen years from the time I heard this story (and more than twenty years after the initial fact). It seems clear to me that the military-industrial complex has secretly declared war on the American people quite some time ago, and is waging a long-term psychological warfare operation, complete with fully operational, mass mind-control technology.

Lastly, I don't say these things so that people will be afraid. The

good news is that these cockroaches don't feel strong enough to be caught out in the light. However, should any of your readers be feeling depressed, anxious or nauseous, before calling a doctor try taking down your TV antenna.

Sincerely,

Mark M., Hollywood, CA, USA.

Re: Clark's Cancer Cure

Dear Duncan: In the Dec. 1994-Jan. 1995 issue of NEXUS I read with some interest the review or Dr Hulda Clark's book, "The Cure for All Cancers".

Not long after, I found out that my 86-year-old uncle had a melanoma on the liver and was given six months to live. He could not be operated on and they gave him radiation treatment to the hips as the cancer had spread to the bones. He became anaemic and the radiation gave him bowel problems. We fixed the diarrhoea with plain old cornflour. By the time I was able to go to Sydney he had been placed in a palliative care hospital.

I took Hulda's book and the appropriate wormwood and walnut with me, and went to Sydney to get him back to his home. I followed Hulda's instructions to the letter (including powdering and capsulising the cloves), and fifteen days into the programme we had to visit the professor who gave him the diagnosis and life-span estimate. The prof. was astounded to find that the liver had shrunk. My uncle has other problems such as heart condition, but the cancer has been beaten.

I noted that for the last two years or so my uncle had been rubbing "Isocol" into his face after shaving, and on his arms as an antibacterial. "Isocol" has 70% by volume of isopropyl alcohol content. Hulda says that people with isopropyl alcohol in their systems will develop cancer of the liver. Rubbing anything into your skin causes it to be absorbed into your system as the skin is the body's largest organ and is highly absorbent

You cannot win them all. I have been flying professionally for 30 years and believe me the story on "The Hollow Earth Theory Patent" was laughable. Anybody knowing

... more Letters to the Editor

NB: Please keep letters to approx 100-150 words in length. Ed.

anything about magnetism, compasses, gyroscopes and global navigation knows why a compass needle 'dips' as it gets closer to either of the poles. To put it simply, the hollow Earth theory is the greatest load of codswallop I have ever read, and can be proven to be so.

I realise that you publish this material without necessarily backing it yourself. A wise move. I was astounded to hear some friends, whom I thought to be reasonably intelligent, postulating the hollow Earth garbage some years ago. I have still yet to understand how supposedly sane people can simply believe and spread this totally ludicrous claptrap.

Yours faithfully,

Len C., Edge Hill, Queensland, Australia.

(Dear Len: Thanks for your letter, but please note there are also a lot of well-educated people who think Hulda's research is "totally ludicrous claptrap" too. Ed.)

Re: Fractured Banking System

Dear Sir: The social responsibility of banking will never be addressed until the worldwide practice of Fractional Reserve Banking is confronted.

What is FRB? Fractional Reserve Banking simply means that a bank is legally permitted to create new credit which is a multiple of the fixed deposits and savings with which it is entrusted. Bank deposits are never the source of loans granted by banks; rather, they become the bank's "Reserve Capital". Note the assumed change of ownership.

Unrestrained FRB caused great financial distress in the United States during the mid-nineteenth century. Congress declared it illegal to lend newly created bank credit at ratios exceeding ten to one, but in 1913 the Reserve Banking system was established and took control under a constitutional amendment that was not ratified by a majority of states. A World War hid this small omission

Under normal restraints a bank can safely lend newly created credit of ten times the value of deposits held in trust. This is because people seldom wish to withdraw all their deposits at

once. Banks pay interest to encourage people to deposit money with them. Higher rates encourage greater deposits. Savings create the bank's power base.

When a bank pays 5% per annum on \$1,000, it only has to pay \$50 for the privilege of legally issuing \$10,000 worth of new bank credit. This new credit costs the bank very little, but they feel no moral obligation to charge a reasonable 1% which would return a profit of 100% each year on the \$50 outlay.

To their great shame, the banks have stolen the wealth of nations by charging 10% for 10 units of credit against each unit of deposited funds, taking 1900% profit! This is a violation of community trust and social justice. After the banks coerced parliament into deregulating banking, they were worse than sharks in a feeding frenzy.

Late 1994 I was amazed to hear a Reserve Bank spokesman proclaim on national television that the lending ratio in Australia was 25 to one! The banks still pay \$50 for our \$1,000 deposit, but now charge our farmers at least 10% for \$25,000 of newly created national credit.

Banks now 'earn' \$2,500 for their \$50 outlay, but when foreclosing they demand over \$7,500 p.a. Because banking methods are covert, local bank managers seldom realise the villainous nature of bank usury. It would appear that few have the intelligence to understand the true nature of this fraudulent industry. When farmers cannot pay extortionate interest, their rates are increased to over 30% in order to bankrupt them and steal their assets. Australian courts uphold the bank's criminal actions.

Banks are essentially clerical establishments with safe deposit facilities. They sow not, but through usury reap wealth and power far in excess of their value to the community. They are voracious and insatiable predators.

An historical study of The Commonwealth Bank of Australia will show the benefits of a bank under parliamentary control. Alien attack is averted and usury is avoided. Abraham Lincoln beat

the foreign bankers when he issued the "greenback". Every country should issue its own money and maintain tight control over its bank of issue.

This is oversimplified because the privately controlled Reserve Banking system takes control of typically 6.5% of all deposits, which it claims for its own use. There are many examples of bank treachery and fraud. Some of the best-known bank officials have blown the whistle, but so powerful is bank propaganda that it muffles all protest with media blankets.

FRB is a most beneficial tool when used with restraint to encourage national development, but it is an incredibly destructive financial weapon when used without discretion by uncontrolled and unethical bankers.

I am only an ordinary citizen and find these facts almost beyond belief. Would you please check them and tell me if I am wrong?

With respect,

Lindsay O., Wooli, NSW, Australia.

Re: NWO not OK in NZ

Dear Sir: I have been subscribing to NEXUS Magazine for almost a year and find it a great forum for those things which are out there beyond where the 'official explanations' stop.

It's a busy time for the NWO in New Zealand at the present with the following 'projects' well under

1) Currently a bill is before Parliament which (inter alia) will make it illegal for journalists to report details of sales of New Zealand land to foreigners.

2) Moves are afoot to remove the right of silence of accused persons because, to paraphrase a senior police officer, too many "guilty" people are being acquitted. There are also judges who support this view. Whatever happened to those quaint notions of presumed innocence and due process of law?

3) Expect to see compulsory DNA testing introduced in the near future for those "suspected of serious offences", although what is deemed "serious" has yet to be decided. Also, there is doubt as to whether one need be formally arrested before being compelled

(by force if necessary) to provide a sample.

And, I like this one. There is going to be provision for people to 'voluntarily' donate their DNA to the national databank. The police are afraid their databank will be insufficient with suspect-only samples. Oh, and while suspects are later cleared, their DNA profiles will remain on the database indefinitely.

4) This concerns Australians as well as New Zealanders. According to a recent news item on national radio, our two countries have been chosen by the banks as the ideal social laboratory to monitor the introduction of 'smart cards' as part of the move to the Cashless Society.

Be seeing you... Yours faithfully,

J. R., Napier, New Zealand.

Re: Microwave 'Kooking'

Dear Duncan: Thanks for the many top articles that appear in NEXUS. In the April-May issue, microwave cooking got its turn, and I would just like to make a few comments if I may.

Those of us with 'a modicum of common sense' are contemplating what to do with an oven that we don't want to cook with any more. Well, a neighbour of mine found that his microwave was handy for drying out green timber for wood turning.

Responsibly, though, we should be considering a 'final solution' for our microwave ovens. No, I don't mean selling the things! (They would be sure to get into the wrong hands.) I was thinking more along the line of a relatively simple 'modification' to render the microwaves harmless.

Perhaps a reader of this column can come up with a sure-fire method of getting these machines to self-terminate. Something spectacular, yet safe. Mega indigestion for the microwave, if you like.

Yes, I can see it now. Whole communities dragging their microwaves out onto the streets. Sparks, smoke, countdowns, people getting together again, united in the cause, yeah!

Bruce H., Clunes, Victoria, Australia.

YOUR DNA ON FILE SOON?

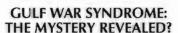
UK — Police in the UK have mounted their biggest operation yet against <u>suspected</u> burglars, as 5,000 officers arrested nearly 1,000 people in dawn raids.

DNA samples were taken from the 911 held, whether they were charged or just cautioned. It was the first time that UK police have used the new powers in the Criminal Justice Act to begin compiling an national DNA database.

Australia — Federal police may soon be empowered to forcibly take biological samples from crime suspects for DNA analysis. If the Forensic Procedures Bill is passed, blood, semen, and pubic hair may be

taken without an arrest being made. The Bill is scheduled to go before federal parliament this year, and is expected to be adopted by the states later on.

(Sources: Guardian Weekly, 14 May 1995; New Scientist, 25 March 1995; The Gene File #1, 1995)



The Pentagon has confirmed that the symptoms of Gulf War Syndrome, reported by more than 50,000 veterans, may have been caused by 'precautionary medicines' issued to allied troops, and not by enemy action.

A Duke University study funded by



Texan billionaire Ross Perot, gives the first plausible scenario of what could have happened. Tests show that the injections, antinerve-gas pills, plus insecticides (which were used to saturate tents and uniforms), are more toxic when used in combination with each other.

While the Pentagon insists it has no evidence that chemical or biological weapons were used by Iraq in the war, unlike Britain the US Government now accepts that Gulf War Syndrome is a genuine ailment, for which veterans are entitled to up to USD\$1,823 per month in disability benefits and subsidised medical care.

Meanwhile, the US Agriculture Department has upheld the sacking of scientist James Moss who was studying the "possibility" that a personnel insecticide given to the servicemen in the Gulf War, when combined with an anti-nerve-gas repellent that was also given to some 400,000 troops, may have resulted in Gulf War Syndrome.

The officials at the Agriculture Department maintain that Moss exceeded his authority and his project had "not been approved through proper channels".

(Ŝources: <u>The Guardian Weekly</u>, 23 April 1995; <u>The Olympian</u>, 10 March 1995; <u>The Leading Edge</u> #80, March 1995; <u>New Scientist</u>, 22 April 1995)

GATT + WTO = NEW WORLD ORDER?

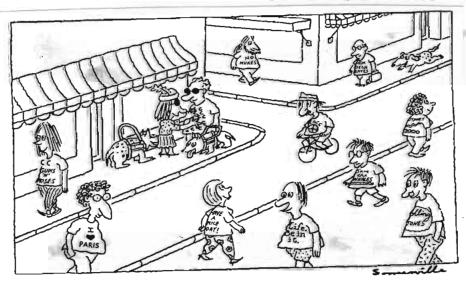
The new GATT agreement is said to be the most complex and extensive international agreement in history. It is safe to assume that few political leaders who signed the document on behalf of their countries actually read the 500-page treaty, or indeed the small print of the 20,000-page addendum. The general public is even less informed.

GATT is a global treaty which not only deals with international trade in goods and services, but also incorporates "intellectual property rights" and "non-tariff trade barriers", among which are human rights, occupational health, trade unions, pesticide contamination of food, and environmental protection.

The first GATT agreement was initiated in 1948 as a temporary arrangement designed to maximise trade incentives for the industrialised countries. It remained a provisional treaty for 40 years during seven separate rounds of negotiation. A new set of negotiations was proposed in 1982 which became known as the Uruguay Round. It was concluded in April 1994, and signed by more than 100 countries, including Australia.

The Uruguay Round was designed and planned by some of the world's most powerful transnational corporations (TNCs) in order to enhance their unimpeded access to global resources, cheap labour and unrestricted markets. Negotiations were conducted behind closed doors, predominantly by the industrialised countries and representatives of major TNCs.

GATT's provisions will be administered by by a newly created World Trade Organisation (WTO). Its mandate is to



... GL BAL NEWS ...

work in tandem with the World Bank and the International Monetary Fund "to achieve greater coherence in global economic policy-making". In short, it is likely that GATT will arm TNCs with unprecedented political power.

(Source: Helen Caldicott, "The New Global Imperialism", <u>The Sydney Morning Herald</u> 14 April 1995)

EUROPE'S BORDERS DOWN AS SCHENGENLAND IS BORN

On 26 March 1995, the external borders of seven European nations came down, and a new word was added to the international lexicon: Schengenland.

Schengenland (Germany, France, Belgium, Spain, Portugal, the Netherlands and Luxembourg) derives its name from the Luxembourg hamlet of Schengen, where, on 14 July 1985, the Convention of Schengen started the final path towards a united Europe. On that day, representatives from Luxembourg, Germany, France, Belgium and the Netherlands first agreed to dismantle borders.

(Source: Vitali Vitaliev, <u>The Weekend</u> <u>Australian</u>, 1-2 April 1995)

GUN CONTROL & PARANOIA

The gun ownership debate continues to rage down-under. NEXUS is regularly contacted by people who claim there is a "hidden agenda" to disarm Australia. Some even dare suggest that many, if not all of the so-called nut-cases who run amok, killing people with guns and then killing themselves, actually show symptoms of mind control.

It is claimed that these people are "programmed" to kill people—and then themselves (to hide evidence)—to generate media hysteria which then helps usher in (usually pre-prepared) restrictive gun legislation.

Whether these readers are paranoid or not, there is certainly evidence to back their claims along these lines.

But consider the following, and decide for yourself whether it was incompetent journalism, or 'something else':

"SKS Chinese assault rifle used in Gympie siege";

"Man armed with semi-automatic rifle holds off Police";

"Automatic rifle keeps Police at bay";

"Man holds Police at bay for 6 days".

These are just some of the headlines a few months ago, when a man set fire to his own car and barricaded himself inside his house for a few days.

Despite these headlines, the police lured the man out of his house and down the driveway to pick up some cigarettes. Apparently he had run out and was gasping, but when he picked them up, the police jumped out of the bushes and chased him back to the house.

But why didn't he shoot the police with his SKS, you ask? That is the point of this story: he did not have any gun at all—no automatic, no semi-automatic, no offensive weapon of any type! After days of searching and metal-detecting, they eventually found a 30-year-old air rifle, full of dirt and missing most of its parts.

(Source: Lock Stock & Barrel, May-June 1995)

COMPUTER CHIPS WITH LIVING BRAIN CELLS?

Battles of the future could be waged with genetically altered humans and animals whose brains are directed by computer chips engineered with living brain cells, according to defence officials and scientific analysts in Washington.

Such a scenario could become reality within the next 15 years if research conducted at the Washington-based Naval Research Laboratory pays off.

Hippocampal Neuron Patterning, as it is called, involves the growing of live neurons (from the brain) on computer chips.

This research, if developed, could have tremendous military and medical implications.

One researcher even suggests that in the not-too-distant future "you could use the memory on a (biological) chip, pop it into your head and learn French". Kyle Olson of the Chemical and Biological Arms

Control Institute, Virginia, says, "The door swings in two directions. You've got this Frankenstein-type weapon on one hand, and it can deal with the problems of the human condition on the other."

(Source: <u>Defense News</u>, vol. 10, no. 11, 20-26 March 1995)

TREES TUNE INTO RADIO WAVES

A radio antenna in the middle of a forest has caused unexpected growth in nearby trees, American researchers say. After the antenna was switched on in Michigan in 1986, the trunks of nearby aspen and red maple trees grew 50% thicker than expected and red pines grew 10% taller.

The 100-kilometre wire antenna was installed through the forest by the United States Navy to communicate with submarines using low-frequency radio waves.

Forestry researchers have been making measurements at a site near the antenna, which generates an electromagnetic field, and at a control site 50 kilometres away.

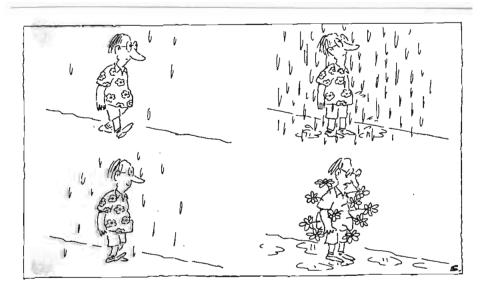
Dr Glenn Mroz of Michigan Technological University says: "We found that aspen, red maple and red pine grow faster when exposed to magnetic fields." Two species of trees—northern red oak and paper birch—appear to be unaffected.

There are two interesting points here:

t) This item would appear to confirm the research into the beneficial effects of certain magnetic fields upon living organisms. (See NEXUS vol.2, nos.17, 18, 19.)

2) This antenna seems to part of a global network as detailed in an article titled, "The Omega Network" (see NEXUS vol.2#16). The real agenda behind these antennae is anyone's guess.

(Source: Daily Telegraph, 28 January 1995)



... GL BAL NEWS ...

NEW EVIDENCE FOR CATASTROPHIC EARTH CHANGE

Earth changes researchers are divided into two camps: those who believe in sudden catastrophic changes throughout the Earth's history, and those who propound the theory of gradualism, i.e., continental drift, erosion, etc.

Catastrophists have long argued that sudden reversals of the Earth's magnetic field have occurred at times of cataclysmic change, whereas gradualists have insisted there is no evidence for sudden magnetic field reversals at all—until now.

In a largely underreported article published in *Nature*, three scientists propose there is "New evidence for extraordinarily rapid change of the geomagnetic field during a reversal".

According to the three geologists, "Paleomagnetic results from lava flows recording a geomagnetic polarity reversal at Steens Mountain, Oregon, suggest the occurrence of brief episodes of astonishingly rapid field change of six degrees per day."

The scientists conclude: "This is not to suppose that geomagnetic reversals take place much more quickly than the several thousand years currently supposed, but rather to suggest that polarity transitions may be punctuated by episodes of extraordinarily rapid field change."

(Source: Nature, vol. 374, no. 6524, 20 April 1995)

'ROUTINE' VACCINATION RISKS

A new formula used in routine vaccinations in Victoria, Australia, has caused mass illness among prep-grade students.

Children suffered severe fever, swelling and vomiting after the City of Geelong recently administered triple-antigen vaccinations at schools, on behalf of the Department of Health and Community Services..

For the first time, the formula included a vaccine against whooping cough.

Geelong parents have hit out at the immunisation, claiming their children were used as a test case.

Little or no information had been given to parents about the vaccination or its sideeffects which left hundreds of children sick for days and hospitalised at least one child.

Most schools in the area reported that half to two-thirds of immunised students were absent due to illness, and those who did attend had to be cared for by teachers.

(Source: Geelong Independent, 13 April 1995)

POLIO JABS RESPONSIBLE FOR PARALYSIS OUTBREAKS

Worrying new finds from Romania indicate that the polio vaccine is actually causing outbreaks of the disease.

Scientists at first blamed the outbreak on the locally produced vaccine, but the rate continued even after the introduction of vaccine used in other European countries.

Researchers studying 31 cases of children paralysed after receiving the vaccine, agree that the polio injections triggered the paralyses. They also discovered that the children had received a large number of other vaccinations in the months leading up to the polio jabs.

(Source: NEJM, 23 February 1995)

MEASLES VACCINE LINKED TO DISEASE

Researchers from the Royal Free Hospital, London, have found evidence that the measles vaccine may play a role in triggering two long-term bowel diseases, Crohn's disease and ulcerative colitis. The evidence, from laboratory and population studies, suggests that people given the measles vaccine are up to three times more likely to develop these diseases.

However, the researchers, headed by Dr Andrew Wakefield, said there should be no change in vaccination policy.

(Source: The Guardian Weekly, 7 May 1995)

LOCKERBIE: CRACKS IN THE LIBYAN FRAME-UP

1) Edinburgh — Relatives of the 270 people who died in the Lockerbie bombing have called for an independent inquiry after a leaked letter cast fresh doubts on the case against the two Libyan suspects. The letter from the German Justice Ministry reveals that investigators in Frankfurt found no evidence that the bomb was loaded onto the jet at Frankfurt Airport.

(Source: <u>The Independent</u>, <u>The Sydney</u> <u>Morning Herald</u>, 11 March 1995)

2) A new documentary, The Maltese Double Cross, is about to air in the UK and Australia. Although the version shown to the TV viewing audience will be edited, it is still expected to arouse a lot of interest.

The documentary alleges that the bombing was financed by Iran and planned by Syrian-based Palestinian guerrillas in revenge for the United States shootingdown of an Iranian Airbus over the Persian Gulf in July 1988.

It demolishes the evidence against Libya, and alleges that several VIPs, including the South African Foreign Minister, Pik Botha, were told not to go on that flight.

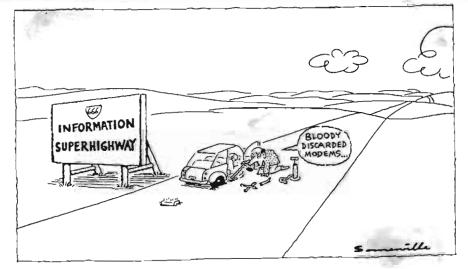
(Source: The Australian Magazine, 6-7 May 1995)

PHONE TAPPING TO INCREASE

1) Germany — Security forces have demanded that all mobile telephone operators in the country must ensure that police can monitor all calls on a proposed new digital network. German Posts Minister Wolfgang Bötsch presented a draft bill before parliament in Bonn in May.

A spokesperson for Germany's three main operators said it could cost each operator around DM50 million (USD\$40 million) to meet the regulations.

(Source: The European, 5-11 May 1995)
2) USA — Following the Oklahoma bombing, President Clinton urged Congress to approve funding for the Communications Assistance for Law Enforcement Act of 1994, better known as the wiretap law. Passed last year, the law requires telephone companies to design their communications systems so that law



GL BAL NEWS ...

enforcement agencies can carry on tapping phone calls.

Other proposals Clinton made as part of the same package include making it easier for police to gather information-e.g., hotel/motel records, credit details, dialled phone numbers-without subpoena.

(Source: New Scientist, 6 May 1995)

SATELLITE SYSTEM TO TRACK **YOUR CAR**

A revolutionary anti-car-theft satellite system, developed in Australia, promises to find your stolen car, and notify police, within minutes of its theft.

Under the new system, the very second a thief breaks into your car without a special key, the alarm bells start ringing.

Within minutes the Mobiletrack system's central control room will tell you and the police about the theft.

The control-room will then—on police orders-activate the remote engine disable (RED) function, which will cause the car to roll to a stop.

The secret of the system is a small steel box hidden within the car, which comprises a compact satellite-receiver and transmitter powered from the car battery.

The system can also operate as an energy breakdown aid, a navigation aid, and for driver-activated emergency calls.

(Source: The Sunday Telegraph, 14 May 1995)

STRANGE FISH-KILL 'DOWN UNDER'

Something is killing adult pilchards along the entire southern and south-eastern coastline of mainland Australia.

The chief suspected culprit is a singlecelled organism similar to that which causes the 'red tide' phenomenon around the world.

Whatever it is, something is causing the adult pilchards to suffocate as a result of a mucous-like substance clogging up gill membranes.

Some researchers are suggesting that pilchards imported from 'red tide'-infected areas off California and the Gulf of Mexico as food for the tuna, were contaminated; and that, combined with a strange, massive, nutrient-rich upwelling of cold water from Antarctica, the northern 'red tide' organism has gained a foothold in the southern hemisphere.

It is estimated that hundreds of millions of fish have already died as the infected areas continue to spread northward to Sydney.

(Source: Stan Deyo Report on Mystery Fish-Kill, May 1995; The Weekend Australian, 13-14 May 1995; The Sydney Morning Herald, 13 May 1995)

THE OKLAHOMA BOMBING

What The Media Forgot To Tell You —

On 19th April 1995, at 9.02.13 am, a massive explosion destroyed most of the Alfred P. Murrah Federal Building in Oklahoma, USA. The building housed offices for the BATF, Secret Service, Drug Enforcement Administration, Dept of Housing and Urban Development,

US Air Force, US Army, US Marine Recruiting Corps, Department of Defense and others.

So far, three people have been arrested—Timothy McVeigh, Terry Nichols, James Nichols. Federal agents started out claiming the explosive device was a car bomb with 1,000 pounds of explosive. Then it was a car with 1,400 pounds. Next it was a truck bomb with 4,000

pounds. It is now a removalist's van with 5,000 pounds of explosive.

Former FBI agent of 28 years, Ted L. Gunderson, of Santa Monica, California has publicly dismissed as a cover-up US Justice Department claims that a single simple fertiliser bomb was responsible for the blast. According to Gunderson, the bomb was an electrohydrodynamic gaseous fuel device (barometric bomb), which could not possibly have been built by McVeigh. According to Gunderson, you would need to possess knowledge of research and security clearances available at an extremely high level within the military. He says that a fertiliser bomb would have left substantial clouds of nitric acid in the area, as well as traces of unburnt ammonium nitrate. Official investigators have specifically looked for these chemicals and have found nothing.

Gunderson claims the bomb used was a sophisticated A-neutronic device used by the US military, and that the specific type of damage done could only have been achieved with this device. He indicated that the presence of the explosive PDTN would be a telltale sign of the A-neutronic device. Interestingly, USA Today (28 April, page 3A) reported that charges against McVeigh came just after FBI Special Agent John Hersley indicated that McVeigh's

shirt had traces of the explosive PDTN

According to a seismological record from the Oklahoma Geological Survey located at the University of Oklahoma, there were two explosions involved in the April 19th bombing, ten seconds apart. This coincides with a number of reports from people in and around the building at the time of the explosions. Despite witnesses and seismological evidence, the FBI insists there was only one explosion.

Linda Thompson, targeted for a smear campaign over her involvement with the Waco uncoverings, alleges that McVeigh is a "fall guy". She points out that there were much fewer people in the building than normal (indicating that many government agents normally working in the building were not there on that day for some reason). She also alleges that a second bomb was found inside the building, and that it was a military device.

Four victims have launched against ICI a massive lawsuit alleging negligence. ICI Explosives USA, a subsidiary of ICI, said there was no indication that its fertiliser had been used to make any bomb, and that it would "vigorously contend" the lawsuit.

The media hype about the bombing turned quickly to blaming right-wing extremists. An endless stream of experts, usually from the notorious ADL (Anti-Defamation League), left the Western world believing that anyone who believes the government is corrupt in any way, is a right-wing extremist. The emotive shots of dead babies rammed this message home to the point that a right-wing extremist is now, in effect, a de facto baby-killer.

The speed at which the government has given the FBI and other agencies sweeping new powers of infiltration, surveillance, search and seizure as well as phone/fax/email interception, has alarmed many and generated more suspicion to a possible motive for a government agency to have arranged the bombing. Indeed, it is a move which is further polarising mainstream USA.

Already, scores of American researchers into NEXUS-type subjects have had their homes and offices raided by the FBI. The raids are usually very polite, and end up with the agents taking all documents, files, books, magazines and videos belonging to the researchers.

The media has recently been focussing on McVeigh's alleged obsession with Waco to the point whereby allegations of government wrongdoing at Waco are stealing attention from the bombing itself, and stalling the new anti-terrorism legislation. Republicans in Congress are now calling for a reopening of the inquiry into Waco, and a general investigation of the BATF. The National Rifle Association is also calling for a congressional hearing on the Waco incident, and have accused government agents-particularly those in the BATF-of being "thugs"

A survey conducted in 1992 showed that 76% of the US electorate agrees that the government is run "by a few big interests", and does not represent the will of the people. A recent US Gallup Poll revealed that 27% of the American population is prepared to take up arms against the US Government

Is McVeigh a fall guy? Did he know what he was doing? Is he a victim of a CIA mindcontrol sting, Gulf War Syndrome, or just plain crazy? Even Time magazine mentions that the implant in McVeigh's body was put there by the military. What was its purpose? Whatever the answers, you can be sure that we, the people, will be the last to know!

Forbidden Archaeology

Overwhelming evidence shows that humanity has been on planet Earth for much, much longer than mainstream science cares or dares to admit.

Not only that, it appears some of our ancient ancestors were more than mere 'cave-dwellers'!

Edited from

A Laura Lee interview with

Michael Cremo, © 1995

Co-author of the book

Forbidden Archeology

Extracted from

Townsend Letter for Doctors

May 1995

Laura Lee (LL): Let me tell you about some of the most extraordinary finds in archaeology. A grooved metal sphere was found in South Africa dating to the Precambrian period. A shoe-print was found in Antelope Springs, Utah, dating to the Cambrian period. A metal vase was found in Dorchester, Massachusetfs, dating to the Precambrian. An iron nail in a stone was found in Scotland, dating to the Devonian period. A gold thread in a stone was found in Tweed, England, and an iron pot in Wilburton, Oklahoma, dating to the Carboniferous era. What do some of these finds have to say about our early history? Well, they're not allowed to say very much because we happen to be operating under a theory of our prehistory that would rather discard such anomalies—which are defined by their being outside the model—than to try to incorporate them or study them fairly. Here to tell the story of forbidden archaeology—and the co-author of a book by the same name—is Michael Cremo. Michael, thanks for joining us.

Michael Cremo (MC): You're welcome, Laura.

LL: Tell me a bit about forbidden archaeology and why you decided to study the field, and a bit about your background as well, please.

MC: Well, I began studying forbidden archaeology in 1984. At that time I was having some discussions with my co-author, Dr Richard Thompson, about human origins in antiquity, and we had heard a few of the reports about anomalous evidence. We decided we would do a thorough research, and I was really surprised with what we found.

LL: What did you find? Just give me a general overview, and then we'll get to the details in a little bit.

MC: Well, if you look at what you see in modern textbooks you'll get an idea that humans like ourselves—Homo sapiens—evolved fairly recently within the past 100,000 years from more ape-like ancestors. All the evidence that's in these books supports that idea, so it looks like a pretty solid case. But when I started looking into it, I found that over the past 150 years anthropologists have really buried almost as much evidence as they've dug up, and most of that evidence that they reburied—in a sense of getting suppressed or forgotten or ignored—is evidence that goes against this idea. It's evidence that rather supports the idea that humans like ourselves have been on this planet for hundreds of millions of years. You named in the beginning a few of the more startling pieces of evidence such as that exquisite metallic vase that was blasted out of some Precambrian rock in Dorchester, Massachusetts: that would make it over six hundred million years old.

LL: Isn't it astounding? Six hundred million years old? Tell me, in your opinion, what would happen if all the evidence were laid out on a level playing field, if there were no discrimination, if there weren't a theory in place, and someone were to come along and say, let's look at the history of the human race on planet Earth and look at the wide range of evidence. What would they conclude?

MC: Well, the first thing you should understand is that if you do put all the relevant evidence on the table, it would require several tables, really, instead of just the small portion of the evidence that's currently being studied. So when you take all of that evidence into account, what it looks like is that you have human beings like ourselves co-existing with other sorts of beings on this planet as far back as you care to trace—hundreds of millions of years, literally.

LL: The co-existing theory isn't so far-fetched because now they think that Neanderthal and Cro-Magnon man co-existed for a hundred thousand years in our history, side by side, contemporaneously. It's the current theory. Isn't that correct?

MC: Right, and there are even scientists today such as Myra Shackley, an English anthropologist, who would say that we are still co-existing with creatures like the

Neanderthals. You have these reports in many parts of the world of various kinds of wild men, such as the Yeti or Snowman in the Himalayas, Bigfoot or Sasquatch in North America, and other such creatures in other parts of the world. So yes, I'd say this coexistence idea is quite a valid one.

LL: Well, let's give this a fair look. Let's look at the evidence We'll start at the beginning and kind of work our way forward, because I was noticing that the farther back you go, you find very,

very sophisticated finds, and as you come forward in time towards the present, there's less and less of the highly sophisticated. But you do start dating man—early man—farther and farther back than the general establishment would lead you to believe. Michael, let's detail a couple of these extraordinary finds that date back millions and millions of years before they're really supposed to, according to the theory in place. Would you like to start with a couple of examples? What I'd like to know are the circumstances of their discovery, how well-documented they are, and where they are today.

MC: Well, I'll give you one very good example from recent history. It's one of my favourites. In 1979 in Laetoli in Tanzania, a country in East Africa, Mary Leakey—who is the wife of Louis Leakey, one of the most famous anthropologists of the 20th century—found in some volcanic ash,

about 3.6 million years old, some footprints—footprints of three individuals. Many footprint experts—physical anthropologists and others—looked at these prints. This is all documented in *National Geographic* magazine and various scientific journals which we cite in our book. You can look it up, chapter and verse if you like, and see the photographs of these footprints: they are

absolutely indistinguishable from modern human footprints. One researcher said that if you went out on a beach today and looked at footprints in the sand, they wouldn't be any different than these footprints. Now, what I found very remarkable is that despite that, the mindset of these investigators and researchers was such that they could not draw the obvious conclusion: namely, that these footprints must have been made by creatures very much like ourselves.

LL: Well, on the one hand, they look at the evidence and use it when it supports their case, but they refuse to look at equally valid evidence when it doesn't. I mean, isn't that being a little bit hypocritical?

MC: It is. We call it a 'knowledge filter', and in one sense we're not talking

about some kind of diabolical plot to deceive the public. It's rather a kind of self-deception that these people engage im. For example, with these footprints they said, "Well, they must have belonged to Australopithecus"—even though they know they have footbones of Australopithecus, an ape/manlike creature that supposedly existed three million years ago in Africa. They have footbones from this creature, but they do not match these footprints.

LL: By a lot or a small degree?

MC: By quite a bit because the footbones of the very ancient ape/manlike creatures, the australopithecines, have very long, curved toes. They have a big toe that's sort of like our thumb. If you look at a chimpanzee, look at its foot. It has a very large

mobile big toe, sort of like our thumb, for grasping branches. So these footprints that were found in Africa, and are dated at 3.6 million years, do not match those *Australopithecus* feet at all.

LL: Why do they choose Australopithecus to provide an explanation for them?

MC: Because they think that is the only creature existing at the time that walked on two legs, and because they ignore all this other evidence, this massive evidence that shows that human

beings like ourselves were around at that time. It just does not enter into their minds to draw the obvious conclusion. You have these humanlike footprints. A human must have made them.

LL: What of the Leakeys? How did they interpret the evidence?

MC: Well, Mary Leakey wanted to say it must have been some kind of ape-man with humanlike feet that made those prints. Now, if that's the only evidence we had, you could say, well, maybe she was right, but in Forbidden Archeology we document many, many categories of evidence: stone tools, all kinds of artefacts, other human bones, complete human skeletons dating back to the same period. That's what makes us think they actually must have been humans that made those prints.

LL: Because it's corroborated by additional evidence...

MC: Right.

This mortar and pestle were found by J. H. Neale, who removed them from a mine-tunnel penetrat-

ing Tertiary deposits (33 to 55 million years old) under Table Mountain, Tuolumne County,

California, USA.

LL: Suggesting that human history has some very interesting chapters which are being ignored simply because we are encumbered by an inadequate theory, other explanations. This is an exciting story, and we'll continue with it.

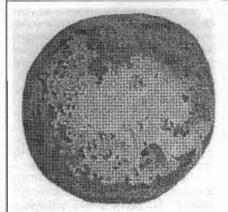
MC: Well, a very interesting case is a skeleton that was also

discovered in Africa, in the early part of this century, in 1913, by Dr Hans Reck who was from Berlin University in Germany, I believe. He was in what is now the area called Olduval Gorge...

LL: Very popular for finds, isn't it?

MC: Right. It's where the Leakeys later did much of their work. In 1913 he found a completely anatomically-modern human skeleton fossilised in strata that were over one million, almost two million years old. Now that's extremely unusual because, according to modern scientific belief, you wouldn't have anatomically modern humans like ourselves until about 100,000 years ago so...

LL: How did they explain it? In 1913 wasn't archaeology just getting a feel for man? Why weren't finds like that put into the



This chalk ball was discovered in an Early Eocene lignite bed near Laon, France. On the basis of its stratigraphic position, it can be assigned a date of 45 to 55 million years ago.

equation?

MC: Well, at that time, the modern ideas were already shaping up with the discovery of Java Man in 1894. Now this is very interesting. It gets into what you would call a detective story because I noticed Charles Darwin wrote *The Origin of Species* in 1859, and that set off intellectual shock-waves that went around the world. The question that most people were interested in was the origin of the human being.

LL: We are rather self-preoccupied, aren't we?

MC: Right. We're not so much interested in the origin of butterflies or the crab. We're interested in where we came from. So I looked at modern textbooks and I could see that from 1859, when The Origin of Species was written, until 1894, when the Java Man finds were reported, I couldn't find any reports. I thought, well, that's very mysterious. You would have thought that, almost immediately, scientists all over the world would have been looking for the missing link and finding all kinds of things. So I asked one of my research assistants to go to a library, get me some anthropology textbooks from 1880 or 1885 or so, just to have a look, and I was shocked by these books he brought in. These were by scientists, not marginal people. These were genuine scientists of the period, reporting in standard journals all kinds of evidence showing that anatomically modern humans-not ape-man, not missing links—were present 10 million years ago, 20 million years ago, 30 million years ago, 40, 50—as far back as you want to go. I'm not talking about one or two discoveries. I'm talking about hundreds, and we've got a thousand-page book, Forbidden Archeology, that describes them all.

LL: It's extraordinary, and I want to know where are these finds? Where do they reside today? What happened to them? With hundreds and hundreds of finds of anatomically-modern human skeletons that date back a hundred million years and

beyond, what's the earliest, earliest that you could find documentation for?

MC: Well, the earliest find that we have on record is—of course, now we're talking about not just human skeletons only but human artefacts of all kinds...

LL: Right.

MC: Things that are obviously made by humans. The earliest artefact we have is a grooved metallic sphere which was discovered in South Africa. Many of these metallic spheres were discovered—perfectly round, metallic objects, some of them with three grooves around their equator—and they date back 2.8 billion years...

LL: Two-point-eight billion with a 'b'?

MC: Yes. And the Earth is said to be about 5.3 billion years old according to current scientific estimate, so these are quite old. Now, the oldest human sign that we have is a footprint that was discovered in Antelope Springs, Utah, in 1968, that dates back to the Cambrian which is about 600 million years ago.

LL: What about the earliest skeletal remains of anatomically modern humans?

MC: The earliest skeleton we have in førbidden archaeology is a human skeleton that was discovered in a coalfield in Macoupin County, Illinois, in 1862, and reported in a magazine called *The Geologist*, a standard journal. It comes from the Carboniferous period and could be about 300 million years old. So these are quite extraordinary finds. Now, one thing that happens, if things do not fit the current paradigm, is sometimes they tend not to be preserved. If you have something that fits the current ideas about human origins in antiquity, then it's kept very carefully by the establishment.

LL: It's fussed o war, it's published, you read about it...

MC: Right You hear about it. It's put on display at the museum, you know. They make videos about it and you see them on National Geographic specials and things of that sort. If something doesn't fit the current paradigm, then you don't hear about it. It doesn't get preserved, and it's very difficult to track down. I would say that people like yourself, media people of all kinds have a duty to look a little bit deeper. It's as if you went to a politician and they were trying to cover something up and you just accepted their story, didn't check on it, didn't dig for the facts. So I think a lot more of that work has to go on. We can't put as much faith as

we do in people just because they occupy a university position or have a Ph.D. behind their name.

LL: I'm in total alignment with you on that point, for sure. Michael, you were just stating a very different view of entertaining alternative theories. You're saying it's one's dury, one's intellectual duty, one's civic duty, that it's really a must to go digging and find out if there are any hidden points of view, any cover-ups, any alternatives—you know, what is the motivation behind the current and reigning paradigm? I've heard so many people express the idea that if you're silly enough to look at ideas that are not endorsed by the establishment, then you're being duped or you're just really being silly and wasting your time. Why this divergent view on participating or at least being willing to entertain alternative ideas, do you suppose?

MC: Well, I think what we have to do is take the same attitude towards science that we do towards politics. For example, if there is some allegation about some political misdeed, we don't just accept and we don't just go to the politician and accept his statement.

LL: Give me your propaganda, in other words, right?

MC: Right. So I think that sort of attitude is now too prevalent. I think we have to become a little more...

LL: Sceptical?

MC: Sceptical. A little more independent in the way that we look at these things, and sometimes it takes an outsider to really look into a question. People vant some independent verification so you can't aways to to the experts and take the opinion in their own field. You need outside people to to in, dig around a little bit and look, and that's basically what we've done with our book. We have gone in there without any preconceptions and

dug around, and we've found quite a bit to show that we're not getting an objective look at the past. We're not being told the whole truth. We're not being given all the facts, so in *Forbidden Archeology* we just try to provide all the facts and let people make up their own minds about these things.

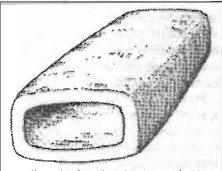
LL: What are your and your co-author Richard Thompson's backgrounds in the field?

MC: We don't have backgrounds in this field other than the research that we've done.

LL: How easy was it to do the research? How accessible were some of these reports? How did you know where to go digging if they're not well-publicised or well-known?

MC: Well, it was like a detective story. You go back in time. You look farther and farther back into the records and you start finding things. Then you have to trace out obscure little footnotes. It's like a cover-up. It's really like a cover-up. You have to really dig for it. We had to get journals, obscure journals, and reports from all over the world, some dating back hundreds of years, and we had to translate them from German derench and Spanish and Russian and whatever languages that happened to be in, so it took about eight years. It took eight years of very painstaking work to gather this information which we then put into this book. It's all thoroughly documented so every reference is footnoted. It's got a complete biblisgraph y.

LL: They don't even have to take your word for it. You provided them the paper trail by which they can go back and reverify the evidence that you provide. Obviously, even in a thousand pages, you couldn't fit in everything. What was your criterion by which you chose what to include in your documentation and your book?



Metallic tube found at Saint-Jean de Livet, France, in a 65-million-year-old chalk bed.

MC: Well, we wanted to choose things for which we had the most solid evidence in terms of documentation and scientific testimony. Now, one thing we learned is that this process of 'knowledge filtration', which we like to call it, is ongoing. It's happening even today. We were very lucky to run into some modern researchers who had been victims of this suppression, and they were kind enough to give us some information about how the system actually works.

LL: How does the system actually work?

MC: Well, there is money involved. There are positions involved. There's opportunity for publication involved. And there are very small and powerful groups of people that control these positions. If you want to become a professor at a university, you need recommendations. If you want your articles to be published in scientific journals, they have to pass what is called 'anonymous peer review'.

LL: People can comment, but you don't even know who they are?

MC: Yeah, you don't know who they are, and in one sense you could say that a dominant group could very easily use that to screen out information that it doesn't want to reach the wider com-

munity, let alone the public.

LL: Is there dissent in academia for this kind of set-up that is so easily abused, or that is so useful to maintaining the status quo, not really expanding the field in terms of its outlook?

MC: Yes, there is. From time to time I tune in through my computer to the Internet...

LL: So do I.

MC: And there are discussion groups that discuss some of the shortcomings of the current system, and there are people that object to it, but it's still pretty much in place.

LL: What are some of these Internet groups? Are they art groups? Are they libraries? I mean, what are some of these places where you can find some of this information? We have a lot of Internet users among our listener-base.

MC: Well, the one that I found—I can't remember its exact name, but it was really odd because it was a discussion about employment opportunities. That was what the discussion group was technically about—about academic positions and how to apply for them, what jobs were available—but there were all kinds of discussions about the system and how it operated, in that particular discussion group.

LL: Right, no sense talking about the positions unless you figure out how they work.

MC: Right. Because for every academic position that opens up, there are usually hundreds of applicants.

LL: Oh, I see, so you're encouraged just by the competition to conform. Right. You're going to do everything you can if you're really serious about that position.

MC: You have real powerful people in these fields who control position, publication and research money, and if you want to get along you have to go along. That's basically how the system works. I've had personal discussions with people who have been victims of that system, who have been denied publication, who have been denied position, who have been denied research money.

LL: What kind of heresy were they wanting to report?

MC: It was because of their views. One case which we discuss in the book is the case of Virginia Steen-McIntyre, a geologist

who worked for the US Geological Survey. She and a couple of other geologists dated a site at Hueyatlaco, Mexico, in the 1970s, where some very advanced stone tools were found-stone tools that could only have been made by anatomically modern humans. They dated the site by the uranium series method and other methods to about 300,000 years. Now, according to current doctrine, you don't have human beings coming into North America until 12,000 years ago, although some people are now willing to extend it to 25,000 or 30,000, but the standard conservative doctrine is 12,000 years. These very, very advanced stone tools, at 300,000 years in Mexico, are extremely anomalous: there shouldn't have been any human beings of that type around until about 100,000 years ago. As a matter of fact, stone tools of the type that were found there don't show up in Europe until about 40,000 years ago, so the fact that they are in Mexico-where human beings shouldn't have been at all-and at 300,000 years-which is 250,000 years earlier than any other such stone tools found...

LL: That creates a problem, doesn't it?

MC: These researchers produced a report, but they couldn't get it published. Nobody would publish it.

LL: But what happened to the tools? Where are the tools

today?

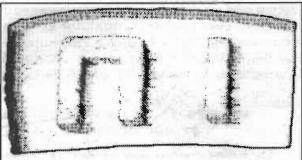
MC: They're stored away in some museum. These were found fairly recently, so you can still find them. We tried to get permission to get photographs of those tools to put in our book, Forbidden Archeology, but we were told we would be given permission to print those pictures only if we gave the tools a date of less than 25,000 years; and if we were even going to mention that they were 300,000 years old, as these geologists reported, we could not have permission.

LL: You know, with all of this information, who's to say how to interpret it? Michael, tell me about another couple of finds, and then I'd like to ask you, isn't all this like a world heritage, and who gets to say what about it? What are some of the restrictions? What are the various methods of dating? How do we know how certain dates are assigned? What are the various methods of assigning dates? I know a lot of it has to do with the strata in which something is found, but tell me some more of these discoveries and we'll talk more about the issues surrounding them.

MC: Well, one interesting discovery was the carved shell in the Red Crag formation in England. Now this is a late Pleistocene formation, about two million years old, and Henry Stopes, a Fellow of the Geological Society of England, found this shell. It's got a human face carved in it, and according to modern views you wouldn't expect artwork of this type in Europe until about 40,000 years ago at the earliest, so at two to three million years it's quite anomalous. It was discovered in the 19th century.

LL: Okay. What's another anomalous find?

MC: Going back to North America and to more recent times where we have some really good documentation of how evidence can be suppressed, we have a case of a Dr Lee who found, in a glacial formation at a place called Sheguiandah on Manitoulin Island in the Great Lakes in Canada, stone tools that are about 70,000 years old. Now, as I said, the current idea is that you don't have human beings in North America until about 12,000 years ago. He was working with the National Museum of Canada at the time that he made these discoveries. He had a geologist come in to look at the site and confirm his dating view of it, but he got



Raised letterlike shapes found inside a block of marble from a quarry near Philadelphia, Pennsylvania, USA. The block of marble came from a depth of 60 to 70 feet. (Ref: Corliss (1978); American Journal of Science (1831), vol. 19, p. 361.)

fired from his job, they wouldn't publish the report, and he couldn't get another job for years. He was extremely upset by that, and all his stone tools that he found were just taken and stored away somewhere out of his control by the museum.

LL: That's how they bury it?

MC: They buried it.

LL: Michael, you mostly include in your book those artefacts that can be well-documented and which required you to go on a detective hunt through the scientific literature, but you were mentioning that some of the less-well-documented finds come from coalminers because they're down there digging in very ancient strata. For example, I've even heard of people who are breaking up coal to put into their stoves, and out pop gold chains and metal vases and just incredible things. Tell me some of the stories of what's been found in some of these very ancient coal-strata, and things that have been found by miners.

MC: Well, here are some of the ones that we discuss in the book, Forbidden Archeology. In 1897, the Daily News of Omaha,

Nebraska, carried an article, titled "Carved Stone Buried in Mine". Now, this was about a piece of rock that was about two feet by one foot, and the rock was carved into the shape of diamonds. It had marks on it dividing the surface into diamonds, and in the centre of each diamond there was an engraving of a human face, a fairly old person. The question is, how did it get down there? This was a mine dug deep into the ground, 130 feet deep. The miners said the earth had not been disturbed—and coalminers are very good at this because their life depends on it. If they're digging somewhere and they can see that the coal has been disturbed, that maybe there was some shaft there previously that had been filled in, they watch out for that like anything because they know they could be buried in a land-

slide or caught underground, so they're no dummies. That coal in that part, near Omaha, Nebraska, was about 300 million years old, so that's heally amazing. Now, where is that object? We tried to track it down, and we could not find it. It was reported in the newspapers. We found a lot of literature about it, but because it's so far out of what modern scholarship would accept, it wasn't put in a museum anywhere. Probably one of the coalminers just kept it, and then when he died it went on to some relative somewhere,

and maybe they threw it out ..

LL: Or maybe it's sitting in an attic, and nobody knows its true

MC: Right. If anybody out there has stories like that, we'd like to hear about them.

LL: Michael, I've heard additionally that there are stone walls buried 150 feet. I know there are examples of that in Texas and California, I believe. Did you come across such huge artefacts as buried stone walls?

MC: We have come across reports of such things. We do mention them in our book. There's one such case, from Heavener, Oklahoma, where we have a report from a coalminer that in the year 1928 he was working in this mine at a depth of two miles, The way these mines were set up, they had different chambers, and each day they would blast out another chamber. So, one morning they blasted out some coal and the miners saw at the end of the room, they call it, a wall of concrete blocks that were very smooth and polished; it was a wall, built down there. They told the mining officers about it, and the officers just put the men out of that mine, sent them to another mine and filled up that part of

LL: Does that seem to be standard procedure when such things are found?

MC: Well, there does seem to be a pattern. One thing that might happen is that some of these cases may be reopened and reinvestigated, you know, by people with more open minds.

LL: Doesn't it make you wonder that if the Earth were transparent for a day and we could actually see all of the dinosaur bones, all of the unusual artefacts, all the human remains, all the footprints, all the things that are buried in the Earth from long, long ago, what do you think we would see, Michael? In what abundance?

MC: Well, I think what we would find is a picture of all kinds of creatures, humans and otherwise, going back for long, long, long periods of time. Now, of course, one problem is that just seeing isn't enough, because a lot of the seeing goes on in our own

> minds, and you can always explain something away. What we found is that there's a double standard in the treatment of evidence. If something goes along with the current ideas, then...

LL: No problem, right?

MC: No problem. If it goes against the current ideas, then you can immediately pick out all kinds of flaws because, with this kind of evidence that you dig up out of the ground, even in the best of circumstances you can always gct some counter-explanation. At the very least, you could just say it was a very elaborate hoax or a fraud...

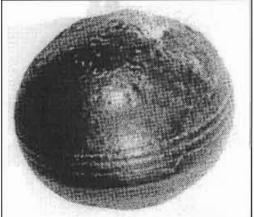
LL: Right, that someone put it in there, or ...

MC: Right. But see, the problem is that if you are going to do that, and you apply the same standard to the things that

you now find in the museums, then you'd have to throw them out, too. For example, if you were to find an anatomically-modern human skeleton in some coal near the surface, if it actually belonged in the coal it would be 200 million years old; but if someone says it's close to the surface so it must be recent, well... But then, most of the archaeological discoveries that we have like Lucy, the most famous specimen of Australopithecus, found by Donald Johanson in Ethiopia in the 1970s—were found on the surface, too. As a matter of fact, most of the Java Man discoveries in Java were found on the surface. They weren't found buried under the ground.

LL: I've heard of gold chains dropping out of lumps of coal. I found these documented in certain books on anomalies of every description. Can you tell me some stories on that?

MC: Well, they are documented in several books including our own. The one very particularly interesting case took place in 1891, and is recorded in The Morrisonville Times newspaper from Illinois. It was actually the wife of the publisher of the paper, you know. Mrs Culp was breaking coal to put into her stove when she found a small gold chain, a very intricately-worked gold chain, in a lump of coal. As a matter of fact, it was so tightly embedded in the coal that two pieces of coal were hanging off each end of it, like a little pendulum, after she broke the piece. Now, what we did was actually verify that the newspaper did have a copy of that article describing that find because we'd heard about it, but we wanted to check with the newspaper itself-and they sent us a



A metallic sphere from South Africa with three parallel grooves around its equator. The sphere was found in a Precambrian mineral deposit, said to be 2.8 billion years old. (Photo: Roelf Marx)

copy of the article. We also checked with the Geological Survey of the State of Illinois about the age of the coal in which that piece of gold chain was found.

LL: What happened to the gold chain? How were you able to document it? It was a story of what someone found in a piece of coal. Other than looking at stories that were written at the time, did you ever find any of these, or is somebody wearing the chain around their neck thinking it's just a regular antique?

MC: Well, we tried to track down that gold chain—about 300 million years old-that was reported in a newspaper. What we found out was that the owner had died in 1959, and the chain had

been passed on to one of her relatives after her death, but we could not track it down any farther than that. Now, that's why we put that case in our appendix of extreme anomalies in that we could not completely document it. The main body of the book is composed of things that are a little less spectacular but much better documented. The artefacts are still there-most of them in museums-and you can see them.

LL: Tom, in San Luis Obispo, thanks for joining us.

Tom: Howdy. I have some questions on the grooved metallic spheres which

were discovered, and I'd like to know how many were discovered, their composition, the method of dating, and whether the dating was peer-reviewed.

MC: Okay. A lot of questions there, but I'll try to answer as many of them as I can. The grooved spheres were found near Ottosdal in South Africa. Now, they have been found for a long time. Hundreds of them have been found. Not all of them have the parallel grooves going around the equator. These have not been reported in scientific journals, and that's why we include this particular case in an appendix in the book. The spheres are kept in a museum in Klerksdorp, South Africa. We corresponded with Roelf Marx, the curator of the museum there, who told us they are a complete mystery to him. He said they look like they're manmade. These are his exact words, that they look man-made, yet at that time in the Earth's history when they came to rest in this rock, no intelligent life existed. Now, that's his assumption, so you see how this works. He said they look like they're man-made, but

they couldn't be man-made because "I know that no human, not any kind of life existed at that particular time." Now, these were found in a pyrophyllite formation, a mineral that has been dated at 2.8 billion years there. He provided that information from a Professor Bisschoff, the professor of geology at a university there, the University of Potchefstroom. These spheres are said to be made of limonite, a kind of iron ore, but it's a very unusual kind of limonite because they are extremely hard. They can't even be scratched with a steel point, which means that in terms of mineral hardness they're extremely hard. Usually just a limonite ore would be very soft, and these are extremely, extremely hard, so they're

very mysterious. Now, as far as peer review goes, no, because they're not described in any scientific journal as such. I don't think you could find any current scholar who would be willing to consider these as made by a human, although they say they appear to be made by humans.

LL: One last parting shot. A partial shoe-sole-print was found in modern Triassic rock, dating to about 250 million years ago. This one had the well-defined thread through which the sole of the shoe was sewn, imprinted right there into the rock. How extraordinary! How can you miss something like that when you can see

the stitching around the sole and when the rock is dated to the Triassic? Where is that rock, by the way ...?

MC: Well, it's another one of these cases of a cover-up. Again, that's one more case of a cover-up where you had something—a wonderful piece of evidence that was shown to scientists. The person who discovered this took it to New York. He took it to Columbia University. He showed it to some of the leading people there at the American Museum of Natural History and turned it over to them. We wrote to the American Museum of Natural History and they had no information about it. They said that the report is not in their files.

LL: Once again, don't believe everything you hear. Let's check out the alternatives. I think it is a very interesting process, a very important process, and it's certainly one that is going to expand our paradigm. Thank you for joining me in that journey yet once again.

I'm Laura Lee.

Figurine from a well at Nampa, Idaho, USA. This

object is of Plio-Pleistocene age, about two mil-

lion years old.

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Forbidden Archeology: The Hidden History of the Human Race, by Michael A. Cremo and Richard L. Thompson. @ 1993 by Govardhan Hill Publishing PO Box 52, Badger, ĈA 93603, USA Phone: +1 (209) 337 2828; Fax +1 (209) 337 2354)

(ISBN 0-9635309-8-4, 914pp h/c, RRP USD\$39.95)

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The Alternatives to Animal Testing

You <u>can</u> do something to help stop the needless suffering of animals.

"Animal Testing—Cosmetics' Hidden Ingredient" and "Questions And Answers About Alternatives In Animal Research And Testing"

Fact Sheets © 1994 by

The Humane Society of the United States
2100 L Street, NW

Washington, DC 20037, USA

ANIMAL TESTING — COSMETICS' HIDDEN INGREDIENT

here is an unrecognised ingredient in most cosmetics, shampoos, soaps, tooth-pastes and other personal-care products. The ingredient is animal suffering. Each year, hundreds of thousands, if not millions, of rabbits, guinea pigs, mice, rates and other animals suffer or die in the safety testing of these products.

Such testing is not required by the federal government. And more and more companies are marketing products without resorting to animal testing. These progressive companies recognise that the tests not only cause animals to suffer, but also are unnecessary and,

METHODS OF TESTING ON ANIMALS

even when used, are of questionable relevance to public safety.

The Draize Eye-Irritancy Test

The Draize Eye-Irritancy Test yields a rough estimate of how damaging a substance is to human eyes. In this test, substances are placed in the eyes of several restrained rabbits who then endure anything from mild redness and swelling to ulceration and haemorrhage of the eyeball. This test is a crude procedure and has little relevance to human safety. Many substances that are irritating to rabbit eyes are nonirritating to human eyes, and vice versa. Indeed, the Draize test has even yielded conflicting results when the same substances have been re-tested on more rabbits.

The LD50 Test

The Lethal Dose 50 per cent (LD50) test provides a rough measure of how poisonous a substance is to people by estimating the amount that is needed to kill 50 per cent of a group of test animals. In the most common variation of the LD50 test, dozens of animals are forced to ingest the test substance. In other variations, they are forced to breathe the test substance in a vapour, powder or spray, or they have the substance applied directly to their skin or injected into their bodies. Mice and rats are most commonly exploited in this test.

The LD50 test produces signs of poisoning such as bleeding from the eyes, nose or mouth, laboured breathing, convulsions, tremors, paralysis and coma. If the animals do not die by poisoning, they are killed at the end of the testing period which usually lasts two weeks.

The LD50 test is crude and nearly useless in protecting the public from unsafe products. The test's results vary so widely, depending on which species is used as the test subject, that predicting the human lethal dose on the basis of the LD50 test is nearly impossible. The test results are also affected by a test animal's age, sex and diet.

WHY IS COSMETICS TESTING ON ANIMALS UNJUSTIFIED?

Cosmetics are not life-saving drugs. Although animal testing of new drugs might be considered a necessary evil, animal testing of new cosmetics is an unnecessary evil. A civilised society should not condone animal suffering to have a new eyeshadow.

DON'T ANIMAL TESTS ASSURE HUMAN SAFETY?

No. Every year thousands of Americans injure themselves using products that had been tested on animals. There are several reasons for this. Products that have been judged harmless on the basis of animal tests can still be harmful to people. Furthermore, those products that have been judged harmful as a result of animal tests are not necessarily kept

Alternatives to Animal Testing



Blood harmlessly drawn from a horseshoe crab yields clumps of blood cells (in bottom of container to the left). The cells are the main ingredient of the LAL test, an *in vitro* alternative that screens intravenous fluids.

off the market. All that may be required for manufacturers to market such products is a warning label which can easily be overlooked by consumers.

Finally, when people are accidentally exposed to a hazardous substance, animal tests are largely irrelevant to mitigating injury because the tests are not designed to yield treatments for such injuries: they simply estimate the destruction that can be caused by a given substance.

AREN'T ANIMAL TESTS REQUIRED BY LAW?

No. The federal Food, Drug and Cosmetic Act does not require premarket testing of cosmetics and personal-care products. More and more manufacturers are ensuring the safety of their products by practising selective formulation—using only ingredients that are generally recognised as safe—and then performing carefully controlled studies using human volunteers. This approach is followed even by companies that test some of their products on animals. At least two companies have admitted that, based on existing safety information, some 70 to 90 per cent of their new products are not tested on animals.

NEW APPROACHES TO COSMETICS TESTING

Most of the cosmetic companies that use animals in safety testing do market some products that have not been tested on animals, but have refused to eliminate animal testing altogether. Many companies consider these tests their defence in the event that they are sued by consumers claiming to have been injured by unsafe products. Nevertheless, in one often-cited lawsuit, the judge ruled that the plaintiff failed to show that "the result of tests on rabbit eyes can be extrapolated to humans" and that the "rabbit studies, standing alone, do not warrant condemnation of this product" (despite injury to the rabbit).

The fear of lawsuits is only partially responsible for the continued use of animal testing. Another factor is the cosmetic industry's slow pace in developing and refining alternative testing methods. It therefore isn't surprising that the industry claims it needs more time to eliminate testing completely. Newer methods of safety testing fall into four categories:

Test-Tube Methods

Also known as in vitro methods, testtube procedures test the effects of substances on isolated cells, tissue fragments or organs. An advantage of these methods is that they allow researchers to test directly on human matter. The following two tests use human-eye tissue, which available from eye banks and eye research centres. The Clonetics Corporation (San Diego, CA) markets the Neutral Red AssayTM, an in vitro eye-irritation test. Neutral red is a dye that is readily absorbed by healthy, undamaged human cells; irritants impair the cell's capacity to absorb the dye. The degree of absorption impairment is a measure of irritancy potential.

Chemical Assays

In Vitro International (Irvine, CA) markets the EytexTM test, a chemical-test kit for estimating eye irritancy. The kit contains a mixture of chemicals that recreates key chemical components of the cornea. The test kit's chemicals, like those in the eye, turn cloudy in response to irritants. The degree of cloudiness is a measure of irritancy.

Tests on Nonsentient Organisms

Single-celled organisms and other animals with limited or no capacity for suffering are nevertheless sensitive to many irritating or poisonous substances. One of the most promising alternatives to the Draize Eye-Irritancy Test involves chicken embryos that have not yet developed to the point where they can feel pain but that have an outer membrane (within the shell) which responds to irritants. The membrane is exposed by cutting a small window in the shell. A plastic ring placed in the membrane serves as a well for the test substance. The degree of membrane response (cloudiness, inflammation and proliferation of blood vessels) is a measure of irritancy.

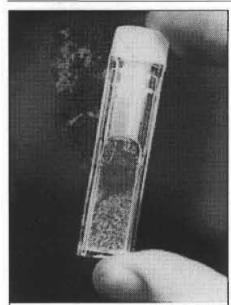
Computer Models

Computer models can help predict hazardous effects based on a substance's chemical and physical properties. The models rely on the information accumulated on already tested compounds to help predict the effects of untested compounds. Based on this principle, Health Designs, Inc. (Rochester, NY) has developed computer models that estimate LD50 values, Draize eye-irritancy scores and other test results.

Many alternative tests have been developed based on these approaches. Coupled with the process of selective formulation, these methods provide cosmetic companies with the tools necessary to market new products without resorting to animal testing. As a result of these technical breakthroughs, as well as considerable public pressure, several leading cosmetic companies have announced either a permanent end to their animal testing, or substantial progress in reducing their animal testing. While questions remain about some of these announcements and about the testing of ingredients (as distinct from the finished products), it is clear that the status quo of animal testing is changing.

Cosmetic companies that are unsatisfied with existing alternative testing methods should refine these methods. In the mean-

Alternatives to Animal Testing



Skintex solution reacts when mixed with a toxic substance. Such a test could replace the Draize skin test.

time, these companies should suspend animal testing and manufacture products only from the long list of ingredients already known to be safe.

Cosmetic companies that continue to test on animals should not hide behind technical arguments about the shortcomings of existing non-animal test methods. In the event that the industry is never completely satisfied with alternative methods and continues to rely on animals to a certain extent, the HSUS would continue to object to the painful testing of cosmetics on animals on the grounds that it is both unethical and powerless to assure human safety.

WHAT ARE SOME SCIENTIFIC DISADVANTAGES OF TRADITIONAL ANIMAL RESEARCH AND TESTING?

Animals and humans differ in medically important ways. Therefore effects of drugs and other treatments studied in animals are not necessarily seen in humans, and many effects that do occur in humans have no apparent counterparts or are not readily observable in animals (for example, nausea or headache).

Animal 'models' of human diseases involve artificially inducing injury or disease in other species. To what extent do the resulting disorders resemble naturally occurring human disorders? It is difficult to know. According to a researcher at the National Institutes of Health (NIH), himself an advocate of animal models, "in virtually no case is an animal model a per-

fect...replica of the human disorder under study. Rather, it is usually a highly simplified, theoretically biased, and incompletely generalised version."

Many animal tests are widely regarded as outmoded. The Lethal Dose 50 per cent (LD50) test, which estimates the dose of a substance necessary to kill half the test animals, has been termed "an anachronism" by the former director of the National Toxicology Program.

WHAT ARE SOME EXAMPLES OF THE ADVANTAGES AND IMPORTANCE OF REPLACEMENT ALTERNATIVES?

A review of all Nobel Prizes awarded in physiology or medicine through 1985 revealed the strong role of alternatives in research that the National Academy of Sciences (NAS) has described as "of the highest calibre, the most enduring influence, and the most importance to biomedical science". Two-thirds of the prizes were awarded to research that included major contributions from alternative techniques.

The National Cancer Institute has replaced the use of mice with a technologically advanced in vitro system to determine the anticancer properties of potential drugs. The new system can screen the effects of about 20,000 compounds on several human cancer cell types for approximately the same cost as testing the compounds' effects on only one cancer type in mice. The number of mice used in the mouse testing, now

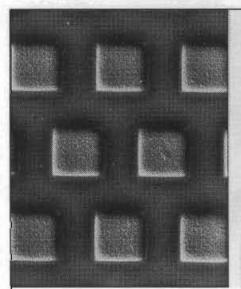
reserved for secondary testing only, has dropped from a peak of six million animals annually to 300,000.

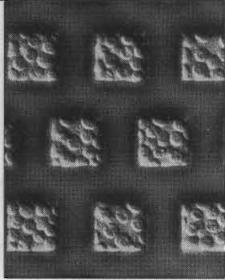
Alternative methods can answer questions that traditional animal studies cannot. According to the NAS, "major recent advances in our knowledge of the immune system made possible by cell cultures would have been virtually impossible to achieve in intact vertebrates."

WHAT ARE SOME SPECIFIC EXAMPLES OF REDUCTION AND REFINEMENT?

In the standard Draize eye-irritancy test, intended to assess how damaging substances might be to human eyes, at least six rabbits receive a relatively large dose of a chemical ion one eye. US regulatory agencies are considering modifications that would reduce the amount of suffering involved. One reduction under consideration is to use from one to three rabbits, instead of the usual six. In many instances, the smaller number can provide nearly the same information as the standard number. One refinement under consideration is to treat the rabbits' eyes with an anaesthetic before adding the potentially irritating chemical.

In the classical LD50 test, researchers attempting to obtain a rough measure of a substance's toxicity deliberately poison scores of animals to estimate the dose that kills half of the animals. Several reduction alternatives using 10 to 20 animals, includ-





A new, high-tech device measures toxicity using microscopic wells in a silicon chip (left), to which human cells are adhered (right).

Alternatives to Animal Testing

ing the Approximate Lethal Dose and the Up and Down Method, have rendered the classical method obsolete. Other modifications of the classical method are refinement alternatives as well as reduction alternatives. The Fixed Dose Procedure and the Limit Test involve fewer animals and, because they avoid poisoning animals to death, lessen any resulting pain and suffering.

WHAT ARE SOME SIGNS THAT ALTERNATIVES ARE STARTING TO BE TAKEN SERIOUSLY?

In the USA, Animal Welfare Act amendments enacted in 1985 mandate (a) the creation of an information service to promote alternative methods, (b) training in alternative methods for laboratory workers, and (c) a review of proposed animal experiments to ensure that the principles of the three Rs are being applied.

The Health Research Extension Act, passed in 1985, requires the NIH, the federal government's largest funding source for biomedical research, to promote alternative methods. The NIH has implemented a special program, albeit modest, that funds research based on alternatives.

In 1986 the Congressional Office of

Technology Assessment released a landmark 441-page report, "Alternatives to Animal Use in Research, Testing and Education".

Corporations and trade associations are increasingly supporting alternatives research in-house and at such institutions as the Johns Hopkins Center for Alternatives to Animal Testing. Several major corporations, including Avon and Revlon, have completely replaced animal testing of their products with alternative methods.

WHAT NEEDS TO BE DONE?

Manufacturers, regulatory agencies and testing companies should endorse the three-Rs approach, aid the development of alternative testing methods, and implement these methods whenever possible.

Public and private organisations that fund research should endorse the three Rs, fund research that employs alternatives, and underwrite research aimed at developing alternative methods.

Consumers and investors should 'vote with their pocketbooks' by buying from companies that embrace the three Rs.

A list of cosmetic companies that market products not tested on animals is available from any of the following groups. ∞

Australia:

Humane Society International, Inc., Australia

PO Box 302, Avalon, NSW 2107 Phone: (02) 973 1728 Fax: (02) 973 1729

Campaign Against Fraudulent Medical Research

PO Box 234, Lawson, NSW 2783 Phone/Fax: (047) 58 6822

Guardians—A Group Exposing Vivisection

PO Box 59, Pascoe Vale South, Vic 3044

Phone: (03) 386 3778 Fax: (03) 386 3778 Hotline: 0055 10575

USA:

The Humane Society of the United States

2100 L Street, NW, Washington, DC 20037

Phone: (202) 452 1100

The Lies of Unleaded Petrol

Highly toxic chemicals are replacing the lead in our fuel, yet government authorities continue to underestimate the serious risks to public health.

Part 2

By Catherine Simons, B.Sc. NEXUS Magazine

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THE COMPOSITION OF PETROL

ast issue we discussed how there was little evidence to support the claim that the octane-raising substances in unleaded petrol are safer than the lead compound used. In fact, there was little or no evidence to support the claim that lead in petrol has any effect on the levels of lead in the blood. Unleaded technology means something else is added to the petrol to maintain its octane number. What has not been made very clear is that since about 1970 the lead content in leaded petrol has been reduced. Policy has meant that, over time, lower and lower maximum lead levels have been set.

There are three main groups of substances the oil companies use instead of lead.

- 1. Aromatics—organic compounds based on the benzene ring, a 6-carbon ring with 3 delocalised double bonds, e.g., benzene, toluene, xylene, etc.
- 2. Olefines—organic compounds which have double bonds. After combustion, one critical by-product is 1,3-butadiene.
- 3. Oxygenates—organic compounds containing oxygen molecules such as methane, ethane or MTBE (methyl-tertiary-butyl ether).

The US Environmental Protection Agency has targeted five toxic air pollutants—benzene and 1,3-butadiene are the top two on the list. They are both highly carcinogenic substances. 1,3-butadiene has only just come to international attention.

Therefore, there is one very important question to ask. What is the present composition of leaded, regular unleaded, and premium unleaded fuel?

In Australia, oil companies do not have to release the exact formulas for making up the petrol mixtures. In Britain it is the same as in Australia: the oil companies provide almost no information about the chemical content of lead. In the US, oil companies have to release the petrol formulae to the US EPA. I managed to find an independent study, done by Dr Michael Dawson and Mr Noel Child of the University of Technology, Sydney, which analysed the composition of many petrol samples from all over Australia. They also compiled a table of petrol compositions from many other countries (see Tables 1, 2 and 3). These figures came from the "International Gasoline Survey, 1994", a report published annually by Associated Octel Company.

Using the figures for Australia as an example, in regular unleaded petrol, the total aromatic content was 27.7%, and benzene level at 2.0% (Table 2). But, for leaded petrol, the total aromatic content was 29.2%, and the benzene level at 2.1% (Table 3). Wow! This means the total aromatic content and the benzene levels are very similar—actually, marginally higher in leaded petrol. If you look at all the other countries in the tables, the percentage content of benzene and total aromatics in leaded and regular unleaded petrol is also very similar.

Standard unleaded petrol has a lower octane number of around 91, whereas leaded petrol has an octane number of 96 or higher. The lead compound added is just enough to increase the octane number from around 91 to over 96. Premium unleaded has an octane number of 96, so it has much higher levels of aromatics—as well as benzene—than other fuels. For premium unleaded petrol in Australia, the total aromatic content was 36.4%, with benzene level of 3.3% (Table 1).

This analysis of Australian petrol was conducted before 1st January 1995. At this time, maximum lead levels were at 0.3 grams per litre. After 1st January 1995, the maximum lead levels were reduced to 0.2 g/litre, which means that more of these alternative additives—the aromatics, including benzene, and/or olefines—have been used. So, leaded petrol today could have even more alternative additives than regular unleaded petrol.³

Table 1: Premium Unleaded Gasolines—An International Comparison (N. G. Child/Dr M. Dawson, 30/3/95)

COUNTRY	SAMPLE DATE	GRADE	RON	SATURATES (%v/v)	OLEFINS (%v/v)	AROMATICS (%v/v)	OXYGENATE (%v/v)	BENZENE (%v/v)
USA	Winter 93/94	Premium	97.6	58.4	7.4	29	5.3	1.1
GREAT BRITAIN	June 1994	Super	98.3	52.4	7.3	38.4	2.1	2.5
GREAT BRITAIN	June 1994	Premium	96.3	59.1	9.3	30.2	1.3	2
SINGAPORE	Late 1992	Premium	97.9	47.6	2.3	43.7	6.4	3.5
AUSTRALIA	Oct/Dec 1994	Premium	95.9	55.6	7.9	36.4	0.0	3.3
ITALY	January 1993	Premium	96.4	58.2	10.7	31.1	4.1	1.6
NETHERLANDS	January 1993	Premium	98.4	59.2	2.9	37.9	6.6	1.7
FRANCE	January 1993	Premium	98.7	50.1	6.5	43.4	2.7	2.6
GERMANY	January 1993	Premium	96.5	52.6	7.7	39.7	2.0	2.3
NORDIC	January 1993	Premium	96.0	55.8	7.3	36.9	4.6	2.7
SPAIN	January 1993	Premium	96.1	47.6	13.6	38.8	5.6	1.7
MID-EUROPE	January 1993	Premium	95.4	55.4	6.9	37.7	4.4	1.8

Dr Michael Dawson says that "Eventually, the lead content in leaded petrol will be reduced to almost nil" in Australia, "and we will have cars not fitted with catalytic converters spewing out tons more air toxics each year than is currently the case."

The third group of alternative octane-raising substances mentioned above are the oxygenates. A major by-product of their combustion is acid aldehyde—the first substance the body produces in the alcohol-detoxifying process.^{1,4} So it seems that the oxygenates are less toxic than benzene and 1,3-butadiene.

Another advantage of oxygenates is that, because they contain oxygen molecules, they cause the fuel to burn more efficiently—and thus lowering the levels of all pollutants from car emissions.⁴

Oil companies in Australia don't use these oxygenates because they are not by-products of petroleum production and would have to be purchased from other chemical companies, thus making them more expensive.

The US EPA mandated that from 1st January this year, a "reformulated gasoline" is to be sold in approximately 25% of the USA.⁵ A limit of 1% of benzene (10% of total aromatic content) is set for this fuel. EPA sources predict that market share for reformulated gasoline will eventually be 70%.¹

The oxygenate MTBE is one of the substances of concern, mentioned in the article extract from Dr Hans Nieper which follows on page 29. (Note: Australia is the only country listed in the tables whose petrol contains no MTBE.)

Taking this into consideration, ethanol and methanol may be the safest additives—or should catalytic converters be phased out of use? Definitely, many more studies have to done on the exact effects of these chemicals.

BENZENE IN THE ATMOSPHERE

The carcinogen benzene is an inexpensive substitute for lead.

As an example, in Germany in 1993, 32 million tons of fuel were burnt. Around 10 million tons of aromatics were in this fuel—and at least three-quarters-of-a-million tons would have been benzene. A significant amount of this fuel finds its way into the atmosphere as benzene.

AIR POLLUTION

effects:

increased."6

Dr Michael Dawson explains that when the oil companies removed lead from US gasoline in the 1980s, the increased aromatic content had two deleterious

"Firstly, air pollution became worse because aromatic compounds are very photochemically active. Secondly, tailpipe emissions of the carcinogen benzene

In 1991 in Germany, about 100,000 tons of fuel escaped during transport from refinery to filling station; 45,000 tons escaped while gasoline was being pumped into gas tanks, and another 33,000 tons escaped from car motors.⁷

Dr Michael Dawson has taken benzene readings in Sydney over an entire month in summer and an entire month in winter. The measurements revealed average benzene levels of 4.1 parts per billion in summer, and 7.6 p.p.b. in winter. Peak concentrations reached between 12 and 25 p.p.b. respectively. These readings were taken at the same place in the city where carbon monoxide levels are monitored by the EPA.²⁸

Britain has recently adopted a maximum of 5 p.p.b. of benzene and has a national target to decrease levels below 1 p.p.b.

Dr Michael Dawson says, "Australia has no safe standard for benzene, and its environmental authorities do not carry out regular monitoring."⁸

The Victorian EPA conducted a study in 1992-93 which found benzene levels in Melbourne's inner suburbs of up to 6 p.p.b. This agency sets a preferred limit equal to about 30 p.p.b. They quote studies which show that over 75% of benzene in the air of industrialised cities comes from vehicle emissions.

Tests of benzene levels in Baden-Württemberg, Germany, mea-

sured statewide average values of between 6 and 46 micrograms of benzene per cubic metre (approx. 2 to 15 p.p.b.). Traffic in Stuttgart produced monthly peak values of up to 62 micrograms (approx. 21 p.p.b.). The Swabian Environment Minister, Harold Schäfer commented that the levels "Frightening, were ...indeed, dramatically high."7

COUNTRY	SAMPLE DATE	GRADE	RON *	SATURATES (%v/v)	OLEFINS (%v/v)	AROMATICS (%v/v)	OXYGENATE (%v/v)	BENZENE (%v/v)
USA	Winter 93/94	Regular	92.1	58.7	12.9	24.4	4.1 (MTBE)	1.10
USA	Winter 93/94	Intermediate	94.2	58.3	11.3	26.1	4.5 (MTBE)	1.11
GREAT BRITAIN			8-4					
SINGAPORE								
AUSTRALIA	Oct/Dec 1994	Regular	91.5	59.6	12.7	27.7	0.0 (MTBE)	2.0
ITALY								
NETHERLANDS								
FRANCE								
GERMANY	January 1993	Regular	92.7	58.6	12.0	29.5	1.3 (MTBE)	1.6
NORDIC				- 0				
SPAIN	100							
MID-EUROPE								

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Harald Notter, spokesman for the environment minister, aware that the Baden-Württemberg case is unique in Germany, says, "Most of the German states approach the benzene issue with great caution, afraid of the costs and perhaps also of the results."

In Britain in 1994, a cross-party group of MPs called on the government to ban sales of super unleaded petrol. The recommendation was one of many aimed at reducing air pollution.

The MPs said that evidence "strongly suggests that the potential health hazards resulting from the excessive aromatics used...outweigh any possible benefits from the reduced lead." They would also like the composition of petrol to be publicised so that people can judge for themselves the environmental effects of different types of fuels.^{10,11}

In Switzerland, it is now compulsory for every petrol pump to be fitted with a negative-pressure vapour hood. This is a device that pumps all the air that is displaced by the petrol, into a holding tank. Therefore, the fumes do not escape into the atmosphere, and a little petrol actually recondenses in the holding tank.

They also use this method in some parts of the US, but there are no plans to use these in Britain or Australia.

HEALTH EFFECTS OF AROMATICS, ESPECIALLY BENZENE

Dr Arthur Chesterfield-Evans, an occupational health expert, believes the public had been misled by claims that by removing

the lead from petrol, its negative environmental and health effects have been reduced. He says, "We have been subject to a concentrated disinformation campaign in the form of a seductively simple 'no lead, no worries' message."8

The US EPA claims that half of all cancer cases may be related to air pollution. For a lifelong exposure to a microgram of benzene per cubic metre

(approx. 1 part per billion), it estimates that 2.8 people per million will be diagnosed with leukaemia. The World Health Organisation comes up with a figure of four leukaemia cases per million, and the German Cancer Research Centre with nine projected cases.²

Professor Cesare Maltoni, of Italy's Ramazzini Foundation for Oncology and Environmental Science, has directed studies showing that cancer is linked to substances from vehicle emissions. For 25 years his Foundation has tested on animals scores of substances found in vehicle emissions.

In 1977, Prof. Maltoni's Foundation showed that benzene was a powerful carcinogen causing many types of cancers, particularly leukaemia. Many other aromatics were tested and they all proved to be carcinogenic. Several other compounds contained in vehicle emissions were also found to be carcinogenic.

Professor Maltoni said, "There are risks with gasoline containing high aromatic hydrocarbons, risks with US gasoline containing high paraffin content, and risks with oxygenate-additive gasolines. Particular concern must be attached to gasolines with a high aromatic hydrocarbon content. Benzene is one of the most powerful industrial carcinogens. Alkyl benzenes likewise entail cancer risk." 12

Many alkyl benzenes break down to benzene in the combustion process. Dr Michael Dawson says that approximately 50% of the benzene emitted from the exhaust comes from the actual benzene in the fuel, 40% is from the toluene (methyl benzene), and 10% from other aromatics in the fuel.

Dr Simon Wolff, of University College London School of Medicine, was originally concerned about Britain's nuclear power-plants. He noticed a tenfold difference in childhood leukaemia rates between certain populations, so he began searching for explanations. He concluded that newer mid-ile-class suburbs and towns with high levels of car ownership and use were the most at risk.

Dr Wolff says that Britain's plan to out beazene levels to one p.p.b. is still not enough. "We should be aiming to lower the lifetime risk of leukaemia to one in a million, compared with 10,000 at present. To achieve that we have to out benzene levels by fifty-or one-hundredfold." Children could develop cancer at much lower benzene exposure levels than adults, because they breathe faster, have much faster metabolism, and their bone marrow is more sensitive.

Studies from Sweden have found messpectedly high levels of leukaemia in petrol-station workers.¹²

Dr Michael Dawson asks, "Why are off companies allowed to substitute a carcinogen (or compounds which are converted to a

Table 3: Premium Leaded Gasolines—An International Comparison	(N. G. Child/Dr M. Dawson, 30/3/95)
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COUNTRY	SAMPLE DATE	GRADE	RON *	LEAD (gPb/L)	SATURATES (%v/v)	OLEFINS (%v/v)	AROMAHOS (%w/s)	OXYGENATE (%v/v)	BENZENE (%v/v)
USA	Winter 93/94	Leaded	94.4	n/a	57.2	11.0	22,8	9.0 (MTBE)	1.1
GREAT BRITAIN	June 1994	Premium Leaded	97.7	0.126	59.7	13.8	25.7	0.7 (MTBE) 0.1 (TAME)	1.7
NEW ZEALAND	1992/93	Leaded	97.6	0.32	66.6	0.8	32.6	not available	3.2
AUSTRALIA	Oct/Dec 1994	Leaded	96.4	0.216	58.4	12.4	29.2	0.0 (MTBE)	2.1
ITALY	January 1993	Premium	98.0	0.13	58.4	9.7	31.9	2.2 (MTBE)	1.9
NETHERLANDS	January 1993	Premium	98.3	0.14	56.2	5.4	38.4	0.7 (MTBE)	2.4
FRANCE	January 1993	Premium	97.8	0.14	50.5	17.0	32.5	0.7 (MTBE)	1.7
GERMANY	January 1993	Premium	99.2	0.13	54.2	5.8	40.0	2.3 (MTBE)	2.3
NORDIC	January 1993	Premium	99.3	0.06	53.5	4.4	42.2	6.5 (MTBE)	2.9
SPAIN	January 1993	Premium	98.3	0.12	49.4	14.1	36.5	4.3 (MTBE)	1.9
MID-EUROPE	January 1993	Premium	96.9	0.13	60.4	6.8	32.8	2.8 (MTBE)	1.6

carcinogen) for a neurotoxin?"6 The carcinogen is released into the air we breathe, while the neurotoxin it replaces comes out of the exhaust as lead oxide or lead chloride which is baked hard and falls to the ground near the road.

Professor Roger Perry says, "I find it really difficult to understand how any government or any serious scientist could take the issues of low levels of lead seriously, and decide to ignore issues such as benzene where levels are already high enough for concern."

Professor Bill McCarthy, head of the Sydney Melanoma Unit, Royal Prince Alfred Hospital, Sydney, says: "Benzene is a highly carcinogenic agent. It causes lung tumours, liver tumours, renal tumours, kidney tumours, leukaemia and skin tumours."¹³

The worrying thing is that whether someone gets cancer from exposure to chemicals is an individual thing; it all depends on tolerance levels. People can take on a certain load of toxins, then all of a sudden a bit more will make them really sick.¹³ For example, people afflicted with Chronic Fatigue Syndrome may feel good one day, but the next day they can't get out of bed.

If you recall, in NEXUS vol.2#23 we published an article by Dr Hulda Regehr Clark, suggesting a link between the solvent benzene and HIV/AIDS—so the implications are of great concern.

HEALTH HAZARDS OF AVIATION FUEL

Aviation fuel contains aromatics including benzene. Michael Dawson, Brent Young and Noel Child have presented a report to a Commonwealth Government Senate Committee on Air Traffic Noise in Sydney. They suggest that with an already high base-concentration of benzene and other pollutants from car emissions, the extra pollutants—especially benzene from air traffic—put people under the flight path at extra-high risk. Their report contains data showing quite high monthly average benzene levels—up to 10.6—under the flight paths from Manchester airport. They say it is "located in an essentially rural environment, and these benzene concentrations can be reasonably assumed to result almost entirely from aircraft rather than motor vehicle emissions." 18

WHICH FUEL TO USE?

In Australia, there is a campaign to encourage owners of pre-1986 leaded petrol-run vehicles to use unleaded petrol. 5.16

My research shows there is little difference in the aromatic levels—so, on that account, it should make no difference which you use. You'd swap a little lead for 5 or 6 points of octane number.

With pre-1986 cars, if you do use ULP, the lack of lead will cause the bores to wear out more quickly. Unless you have hardened valve seats, they will slowly settle into the head (but, in any case, the valve seats in today's vehicles are not always hardened).

However, I would definitely not recommend using premium unleaded fuel because of its much higher aromatic content.

The question remains to be asked: "Why are catalytic converters so important to have fitted on cars designed for unleaded petrol, when the leaded fuel we still buy for cars without catalytic converters contains the same composition of aromatics?"

In New Zealand the situation is different. ULP technology has been introduced without any cars being fitted with catalytic converters.^{1,17}

(By the way, Associated Octel is the company that makes the lead compound used in petrol.⁴ The petroleum cartels once owned Associated Octel, and all but sold it off after the introduction of unleaded technology—so any reintroduction of lead would not be in their interests.)

CATALYTIC CONVERTER CHAOS

In theory, a catalytic converter is supposed to convert 90% of the unburnt part of the fuel and turn it into a safer substance. But in practice, as mentioned in the last issue, they take 10-15 minutes to warm up before they work, and they cease to work after 40,000 to 50,000 kilometres. So, much of the time, they'd definitely not be doing what they're supposed to be doing.

"They supposedly fall off" in efficiency, "but there's been no work done in this country on it," says Ron Castaldi of the Australian Institute of Petroleum.9

In 1994, the Australian Committee on Vehicle Emissions and Noise (ACVEN) started a survey to check emissions from 600 cars nationwide. "Benzene is not one of the controlled emissions," says Project Director Peter Anyon of the Federal Office of Road Safety.*

Professor Roger Perry, Professor of Environmental Control and Waste Management at London's Imperial College of Science, Technology and Medicine, asks, "Do you remove 95% of hydrocarbons when the catalyst is new, and then 60% in three years' time? Does the 60% mean the easy ones, and the difficult ones are not being removed? No one can answer that. Benzene is a stable aromatic material; the odds are that it would be one of the last to be oxidised. The more inefficient the catalytic converter becomes, the more benzene would get through the system."

Noel Child says it's actually very similar technology to the

process used in oil refineries to make benzene from straight chain molecules: it all depends on the operating conditions. The manufacturers fit the converter, and away goes the car—but what's really going on there is a mystery.

Hydrogen sulphide (rotten-egg gas) emissions can also regularly be detected from cars with catalytic converters. According to Noel Child, the gas tends to be emitted from newer vehicles. H₂S is a highly toxic substance able to attach itself to haemoglobin and thus block oxygen absorption.⁴

The extract commencing on page 29 is by Dr Hans Nieper of Hannover, Germany, who has made some very interesting discoveries about what actually goes on inside catalytic converters.¹⁹

CONCLUSION

One thing that's very apparent is that vested interests want to withhold this information from the public. Aromatics are the least expensive of the octane-number increasing fuel additives. Having catalytic converters on cars makes many people believe that most of the toxic fumes have been greatly reduced.

But, for sure, there is now greatly increased interest in this subject. For example, the Royal College of Physicians, London, is having an International Air Toxics Conference in November this year. At least two presentations will be from Australia, with Noel Child presenting a paper titled, "In Search of a Green Gasoline". Dr Michael Dawson and Noel Child will also be presenting their research into benzene levels.

Footnotes:

- C. Simons telephone conversation with Dr Michael Dawson, Department of Chemistry, University of Technology, Sydney, Australia, May 1995.
- Dr Michael Dawson and Noel Child, "Study of Benzene Levels in Sydney", University of Technology, Sydney, Australia, published August 1994.
- Dr Michael Dawson, "Benzene, the Devil Around the Corner", letter published in *The Australian*, 28 September 1994.
- C. Simons telephone conversations with Noel Child (Ph.D. pending), consulting engineer and lecturer in Environmental Engineering at UTS, May 1995.
- Dr Michael Dawson, "Not Overlooking US Experience", The Australian, 19 September 1994.
- 6. Dr Michael Dawson, "No Simple Solution to Lead-Free Petrol", *The Daily Telegraph-Mirror*, 10 November 1994.
- 7. In-House Staff, "Hushed-up Dangers", Explore!, vol. 5, nos. 5 and 6, 1994.
- 8. Julian Cribb, "Cancer Chemical Detected in Air", *The Australian*, 12 August 1994.
- Simon Grose, "Choose Your Poison," The Canberra Times, 26 March 1994.
 "Ban Urged on Super Unleaded Fuel", The Guardian Weekly [UK], 6 November 1994.
- "No Turning Back to Leaded Petrol, Say MPs", New Scientist, 29 April 1995
- Julian Cribb, "Scientists Debate Carcinogenic Risk of Cars", The Weekend Australian, 13-14 August 1994.
- 13. Darcy Maddock, "Leaded Versus Unleaded Petrols", Australasian Health and Healing, November 1994-January 1995.
- C. Simons telephone conversation with Prof. Bill McCarthy, Executive Director, The Sydney Melanoma Unit, Royal Prince Alfred Hospital, Sydney, Australia, May 1995.
- Hulda Regehr Clark, Ph.D., N.D., The Cure For HIV and Aids: With 70 Case Histories, ProMotion Publishing, San Diego, California, USA, 1993.
- 16. Jack Haley, Manager, Vehicles and Environment, NRMA, letter published in Australasian Health and Healing, vol. 14, no. 2, February-April 1995.
- 17. "One Petrol Problem Swapped For Another: Expert", Wheels Weekly [New Zealand], 11 November 1994.
- Dr Michael Dawson, Brent Young and Noel Child, "Air Quality Considerations, Kingsford Smith Airport", University of Technology, Sydney, Australia, May 1995.
- Dr Hans Nieper, "Nerve Gas from Cars with Catalytic Converters", letter published in *Townsend Letter for Doctors*, December 1994.
- [* Note ref. Tables 1, 2, 3: RON = Research Octane Number.]

NERVE GAS FROM CARS WITH CATALYTIC CONVERTERS

by Dr Hans A. Nieper

Some of you may have read the latest edition of "Steuerbegunstigter Lungenkrebs" [approx. translation, "Tax-Privileged Lung Cancer"], the 100-page documentation concerning the dreadful problems associated with platinum catalysts in the exhaust gas systems of automobiles. Let me refer at this point to this documentation: none of the facts I described in such documentation has had to be revised or withdrawn to date. Car drivers are now being confronted with the indirect economic problems I predicted in this documentation: if the catalytic converter does not meet the [recently introduced] compulsory exhaust gas tests which will occur rather often. Repairs will have to be made which could pose an extreme burden for some families, going as far as compelling them to skip their annual vacation, for example.

I was slandered in a very ugly manner by ADAC [the German automobile club] and by the industry, e.g., by the spokesman of Shell AG, following the interview I gave out ZDF (right after the TV series, Black Forest Clinic) in July 1987, because I wanted to make people aware of the problems associated with benzene intoxication through unleaded catalytic converter gas. What has become of this? There is still too much benzene in the 'cat. gas'. This carcinogenic benzene which is easily soluble in fat, has even been detected in candy bars sold at gas stations. After this, I was disparaged because I attributed a potential carcinogenic effect to

toluene, a methyl benzene—large quantities of which are contained in unleaded gas.

I had thought that I had described exhaustively the information an analyses of the 'cat.' problem until 1991, as reported in "Tax-Privileged Lung Cancer". However, the facts we have gathered since April 1991 overshadow even the darkest fears we had previously.

For me, this new development started with a detailed feature by Larry King—broadcast at Easter of 1991 by CNN—which I had the opportunity to watch in Florida. Larry King is number one among all of the highly efficient TV moderators in the US. The subject matter of the discussion was the so-called chronic fatigue syndrome (CFS)—a recently discovered disease in the US. It has also occurred in Japan ("man-killing syndrome"), in large Australian cities (where they drive Japanese cars), and particularly in Switzerland.

The symptoms of CFS are as follows: people become tired and exhausted, even during the day after having slept well the night before. A little over 60% become easily depressed. This depression does not react to the usual antidepressants. Furthermore, various chronic infections occur—in particular, infections of the lymph system, of the urinary passage and the respiratory tract—

Continued on page 75

Big Brother's Recipe for "Revolution in Military Affairs"

In light of recent events, are we currently in the midst of an engineered revolution such as this?

by Glenn Krawczyk

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THE REVOLUTION

In 1994, the Strategic Studies Institute (SSI) of the US Army War College (Carlisle Barracks, Pennsylvania) produced a paper entitled, "The Revolution in Military Affairs and Conflict Short of War". In the paper, the authors propose that, "Many American strategic thinkers believe that we are in the beginning stages of a [sic] historical revolution in military affairs (RMA). This will not only change the nature of warfare, but also alter the global geopolitical balance."²

This revolution is not only strategic. It is also fundamentally technological.

"Sensor technology, robotics, nonlethal weapons, and intelligence meshes will be used in combatting terrorism, countering narcotrafficking, and peace operations. These technologies, along with simulator training and unmanned aerial vehicles, will also be useful in insurgency and counterinsurgency."

The authors of the SSI paper recommend ongoing research, analysis and debate on a number of topics including, "Technology designed specifically for conflict short of war, especially psychological, biological, and defensive technology." They also suggest that, as "large numbers of Americans may find themselves in areas of instability and conflict", such individuals might benefit from being "equipped with an electronic individual position locator device (IPLD). The device, derived from the electronic bracelet used to control some criminal offenders or parolees, would continuously inform a central data bank of the individuals' locations. Eventually such a device could be permanently implanted under the skin..."

The paper also openly declares that, "Behavior modification is a key component of peace enforcement," and that "Soft kill' systems can play a key role." Furthermore, with regard to counterinsurgency, "Greatly improved intelligence gathering and fusion is a primary component of the RMA, and proposed information warfare capabilities might be ideally suited for helping develop desired emotions, attitudes or behavior."

The authors recognise that, "The use of new technology may also run counter to basic American values", and that, "Deception, while frequently of great military or political value, is thought of as somehow 'un-American'."

Due to this fact, and also that the majority of Americans may find the use of many of the emerging technologies "morally difficult", the authors conclude that the military might consider that "American values and attitudes thus form significant constraints on full use of emerging technology, at least in anything short of a perceived war for national survival "9

The central premise of the paper is that:

"In its purest sense, revolution brings change that is *permanent*, *fundamental*, and *rapid*. The basic premise of the revolution in military affairs (RMA) is simple: throughout history, warfare usually developed in an evolutionary fashion, but occasionally ideas and inventions combined to propel dramatic and decisive change. This not only affected the application of military force, but often altered the geopolitical balance in favor of those who mastered the new form of warfare. The stakes of military revolution are thus immense..."10

With such "immense" stakes, might the military have felt the need to covertly foster revolution in order to bring about the change necessary to make the use of new weapons and technologies less "morally difficult" for the American people? The paper leaves the reader in little doubt that the answer to this question is resolutely affirmative, for the paper declares:

"Overcoming these constraints to make a RMA in conflict short of war would require fundamental changes in the United States—an ethical and political revolution may be necessary to make a military revolution."¹¹

The authors then declare that, rather than being limited by "constraints and countermeasures", "there is another alternative: we could deliberately engineer a comprehensive revolution, seeking utter transformation rather than simply an expeditious use of new technology."¹²

Have the opening moves of such a revolution already been played? Is the American national security establishment already at war with its own citizens (and those of other 'civilised' nations) in order to coerce them to accept the formerly unacceptable by means of "the manipulation of images, beliefs, attitudes, and perceptions" that is, psychological warfare? Once again, the reader

is left with little doubt that the answer to this question is a resolute YES.

The authors write that to achieve a "Revolution in Military Affairs", the Army must fully recognise that psychological technology is of much greater importance than strike technology:

"Ways must be found to use emerging technology, including advanced artificial intelligence and information dissemination systems, to help military strategists develop, implement, and continually improve methods of influencing opinion, mobilizing public support, and sometimes demobilizing it."¹⁴

"there is another alternative: we could deliberately engineer a comprehensive revolution, seeking utter transformation rather than simply an expeditious use of new technology."

democracy, national self-determination and international law to which the United States is publicly committed."¹⁵
In 1992, an Association sub-group known as the Electronic

In 1992, an Association sub-group known as the Electronic Surveillance Project published a preliminary investigative report, entitled "Microwave Harassment & Mind-Control Experimentation", which detailed the covert deployment and testing of emerging behaviour-modifying directed-energy technologies on US citizens against whom the United States Government has no legitimate legal or moral claim. The initial study investigated the claims of 12 alleged victims of covert harassment and experimentation. By mid-1993 the Association had been contacted by approximately 72 victims, and at the time of this writing has been approached by over 200 such individuals.¹⁶

In a 1993 supplement to the original report, written by Julianne McKinney, Director of the Electronic Surveillance Project and

author of the initial report, it states:

"While the majority of these 'experimentees' reside in the United States, a number of virtually identical complaints have also been received from England, Canada, and Australia. It would appear that these activities are also ongoing on the European continent, and in the former Soviet Union. Connections between this global pattern of activity and the objectives of the so-called New World Order remain to be determined.

"The categories of types of complaints being received by this Project have also changed since publication of this report. Survivors of certain satanic cults (alleged to protect the interests of government and military 'political satanists' in this country), for-

mer Vietnam-era 'programmed assassins', prison inmates, and socalled 'UFO abductees' are now reporting an array of experiences (and symptoms) which are remarkably similar to those addressed in this report. Experimental drugs, induced auditory input, vicious overt harassment, attempted psychiatric discrediting (unless the experimentee dutifully claims to be a UFO abductee), and an extremely painful array of externally-induced symptoms are included in this shared panoply of experiences."

McKinney later states:

"It has been suggested that the long-term objective of all this experimentation is to develop a system by which all (surviving) citizens of this country may be monitored and tracked by a sophisticated, perhaps satellite-based cybernetics system. Certainly some of the research being dedicated to 'mapping of the brain' shows this potential. We are in receipt of preliminary information which points to magnetic resonance imaging as being critical to this process." ¹³⁷

Upon reading the Strategic Studies Institute paper, "The Revolution in Military Affairs and Conflict Short of War", McKinney wrote to the authors, Steven Metz, Ph.D., and LTC James Kievit, to critique its content. In the letter, McKinney writes:

"First, I noticed a rather curious omission in your paper; namely, the impact of a 'revolutionized' military upon the rights of US citizens as they might be inferred to exist under Article IX of the United States Constitution.

THE RECIPE

The Association of National Security Alumni is a Marylandbased organisation composed primarily of former US national security establishment employees who oppose the use of covert operations. The Association's letterhead declares their credo:

"...Covert actions are counterproductive and damaging to the national interest of the United States. They are inimical to the operations of an effective national intelligence system and corruptive of civil liberties, including the functioning of the judiciary and a free press. Most importantly, they contradict the principles of



True, your have expressed some concern about potential 'ethics' violations resulting from unconstrained evolutionary or revolutionary processes; however, I see no reference anywhere in your paper to the military's primary responsibility in upholding, protecting and defending the US Constitution."18

Armed with information gathered during investigations by the Electronic Surveillance Project, as well as the testimony of the individuals whose cases the Project has studied, McKinney suggests in her letter that the "recipe" for a successful "revolution in military affairs" (RMA) was, in fact, considered some 30 years ago and may presently consist of the following ingredients:

"Satanic Cults; UFO Cults, Directed-Energy Technologies; Neurocybernetics/Psychotechnologies; Biotechnologies/Experimental Drugs; Multinational Government Contractors and Subsidiaries; Investment Portfolios and Other Financial Inducements; Imported East Bloc Mercenaries and Military Equipment; Imported Foreign National Scientists; A Controlled and Compliant Media; Decentralized US Government Control; An Induced Crime Wave." 199

Julianne McKinney herself is a former US Army intelligence officer who apparently ran operatives out of Berlin. Bearing this in mind, it is perhaps reasonable to assume that she would have a fair understanding of the typical mindset of members of the national security establishment, and that her list of "ingredients" may therefore be based on something more than idle and uninformed speculation. One "experimentee" from whom this author recently received correspondence refers to Ms McKinney's assessments as "impeccable military know-how".

McKinney wryly (and accusingly) suggests in her missive to Metz and Kievit of the SSI that the above ingredients might result in their desired "revolution in military affairs" if combined in the following manner:

"Instructions:

"1. Raise one or two generations of children under the auspices of government-approved satanic cults, such as Col. (USA Ret.) Michael Aquino's Temple of Set. Violent sexual, physical and psychological abuse of these children over a period of 15 years will produce generations of dissociative automatons who will comply with instructions in obedient, unquestioning fashion. Their required adherence to cult tenets precludes any consideration of laws governing US society, generally. Cult-programmed "graduates", among other things will be expected to participate in contrived UFO abduction scenarios.

2. Create a global UFO cult, which will involve the abduction of citizens so as to foster an illusion that this earth is facing an extraterrestrial invasion. UFO abductees-of-preference will have an expertise in computer technologies, since that expertise will be required in future technocratic RMA scenarios. Use of experimental drugs, holographic projection capabilities, directed-energy technologies, induced auditory input, experimental aircraft, and special effects costuming and stagecraft, among other things, will be used to persuade abductees of the reality of their circumstances. Official denials regarding these events will employ reverse psychology to ensure that all such denials are taken as official confirmation of an imminent and/or ongoing extraterrestrial invasion. UFO abductees will be persuaded to worship their anticipated extraterrestrial 'conquerors' in cult-enforced religious fashion. UFO cult networks will be controlled by US Intelligence to limit infiltration and ensure that dissidents do not disrupt UFO cult long-term agendas. Uncontrollable dissidents will be assassinated, preferably by directed-energy means. Dissociative satanic cult graduates will handle all such executions; i.e., when not actively lending

logistical and theatrical support to UFO abduction operations.

"3. Directed-energy surveillance and weapons technologies of ALL types will be used for purposes of spreading fear and confusion in the population at large (under deniable circumstances); for eliminating persons deemed 'adversarial' to US national security interests; and for spotting, assessing and manipulating potential recruits to RMA causes.

"4. Neurocybernetics and other psychotechnologies will be used to sow confusion and hypochondria in the population at large. The symptoms and effects produced by these and other directed-energy technologies will parallel the effects produced by various microbes, viruses and chemical imbalances, thus compelling a large segment of society to seek medical intervention which, in turn, will be a basis for their being used for medical experimentation under 'voluntary' circumstances. Psychiatrists and psychologists will play an important role in these experiments, particularly where denying the efficacy of neurocybernetics/psychotechnologies is concerned. Citizens complaining of 'hearing voices' will be used as a basis for (generously) government-funded, schizophrenic-related brain research, since comprehension and control of the human brain is critical to the sustained success of any long-term RMA. (Total control of the human mind may have to wait another century or so.) Satanic cult graduates, drug deal-



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ers, gang members recruited off the streets, and foreign nationals will be housed at black-funded government expense (under comparatively luxurious circumstances) and trained in the use of these directed-energy technologies. (Technicians who may be obliged to drive targeted US citizens insane or to their deaths do not need to be burdened by considerations of morality, ethics or the US Constitution.)...

"5. Mix biotechnologies and experimental drugs generously throughout all of these ingredients. The unsuspecting US citizen of today may be the cyborg soldier of tomorrow.

"6. Multinational corporations under contract to the US Government play a very important role in this recipe—particularly those engaged in the development of directed-energy surveillance

and weapons technologies, and those in the business of telecommunications. Corporations and their subsidiaries will have the primary responsibility of experimenting on US citizens with directed-energy technologies under appropriately-deniable circumstances; and of maintaining all records concerning the results of that experimentation. Corporations will also systematically install surveillance and directed-energy targeting systems in government and other office buildings, in public establishments, in educational institutions, in apartment buildings, in neighbourhoods, on streets and highways, and in prisons, jails and psychiatric institutions. The public's attention will not be drawn to the antenna arrays and other

ground-based devices and wiring configurations being used for this purpose. The Ground Positioning Satellite (GPS) system [sic] will play an important part in these activities, with the expense to be sustained by government-funded contractors. Centralized control of these surveillance and targeting systems will be maintained in appropriately deployed bunkers, at an expense to be assumed by black-funded corporate contractors. Contractors may toy with these systems on an occasional basis, such as by bringing down an airliner or two for test purposes (such as, recently, near Pittsburgh); by inducing occasional targets of surveillance to erupt into acts of violence involving mass murder; and by assassinating

occasional sports and public figures who exceed agreed-upon standards of mediocrity. However, no concerted large-scale effort is permitted until the ingredients of this recipe have obtained a 'proper mix'.

"7. Investment portfolios and other financial inducements are critical to the long-term success of this pending RMA. There is much money to be had in the development of directed-energy systems and biotechnologies. Lucrative investment portfolios have a way of keeping Members of Congress, owners of the Major Media and other public officials silent. (Satanic cult 'kiddies' trained as porn stars serve an equally useful purpose, as do demonstrations of the effectiveness of directed-energy technologies on more obstreperous types; however, greed has long been recognized as

the primary mover and shaker in matters covert and should be exploited accordingly.) Financial inducements otherwise have a way of buying the continued cooperation of all persons participating in or directly knowledgeable of the ingredients in this recipe.

"8. Out-of-work East Bloc military personnel and their vehicles and other equipment will be brought into this country under the guise of a "UN" logo, to be housed under comparatively luxurious circumstances at black-funded corporate expense, for specialized urban/LIC [low-intensity conflict] training under otherwise deniable DoD auspices. Use of a UN logo on incoming vehicles and uni-

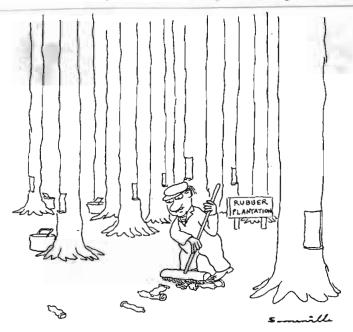
forms is to spread confusion and fear in the populace at large, thus facilitating efforts by this government at eliminating that institution as a potentially effective tool for peaceful change. Imported East Bloc soldiers will be paid as mercenaries for employment in this country only when a proper mix of this recipe's ingredients has been obtained.

"9. Foreign national scientists, predominantly from the Far and Near East and from Germany and Russia, will be brought into this country to participate in such activities as brain and biophysics research as they pertain to the further development of neurocybernetics and other directed-energy technologies. Foreign national

scientists, unlike most Americans, are not burdened by early indoctrination concerning human rights vis-à-vis lethal forms of involuntary human experimentation. Foreign national scientists have also demonstrated a greater capacity for imaginative (and obedient) scientific research than exists indigenously in this country. Their brains must be picked.

"10. A controlled and compliant media is critical to sustained deniability in this evolutionary process. The media will ignore complaints from US citizens regarding growing evidence of police- state actions in this country, while concurrently lauding the military's advanced technologies as being the 'gentle' supplement to existing conventional weapons systems. The media will also ensure that the public's attention is kept diverted from more serious issues and, instead, that it is focused on hyped-up 'sleaze' events, such as The Kneecapping of Nancy Kerrigan, O.J. Simpson's Problems

"...Mix biotechnologies and experimental drugs generously throughout all of these ingredients. The unsuspecting US citizen of today may be the cyborg soldier of tomorrow."



With Satanic Cult Murders, The Bobbing of Bobbitt, etc., etc. When pondering the national security implications of an Amy Fischer, the public is not likely to notice the antenna arrays springing up around this country like mushrooms, the inducing of 'sick' offices buildings and public establishments by directed-energy means on an ever-widening basis, or other similar indicators of an evolving RMA.

"11. Decentralized government control—a panacea currently being sought by a befuddled American public to relieve their (contrived) economic woes—is one means by which FCC oversight can be permanently eliminated. FCC monitoring of communications frequencies might ultimately result in an untimely disclosure that those frequencies are being used to facilitate implementation of a successful RMA and should therefore be squelched. Decentralization will be employed selectively and with much diverting Congressional fanfare. Law enforcement agencies will be subjected to greater centralised control, as will those agencies and institutions such as the FDA which are currently engaged in biomedical research. With the help of a compliant media, the centralisation of these latter types of agencies will elude public attention.

"12. Crime in this country will be induced. The sales of illegal drugs and weapons reap profits which help fund the foregoing. This activity is the preferred alternative to increased taxes, since tax increases tend to alienate a public which already has doubts about where its money is going. Drug dealers will be protected, since they play an important role in this recipe. Widespread addiction to illegal drugs and drug-sale profits will serve to eliminate and neutralise a large (parasitic) segment of society which might otherwise make undue demands for a 'piece of the American Pie' (employment, education, etc.). Drug addiction fosters a certain degree of crime; however, to ensure that the public

comprehends the need for martinet laws, expanded law enforcement capabilities and greater numbers of prisons, crimes of a sensational nature will be induced on a periodic basis which, with the help of the media, will lead to the public's voluntarily agreeing to sacrifice its privacy for safety. Neurocybernetics, psychotechnologies, biochemicals and directed-energy weapons and surveillance systems will be used to induce acts of violence, ranging from simple one-time mass murders (such as in post offices and on subway systems) to long-term serial killings involving cannibalism and other gruesome deeds. Rape and child molestation will be facilitated by means of directed-energy (radar) targeting of reproductive organs. The perpetrators of these crimes, by claiming to hear 'voices' and to be the targets of radio-frequency harassment, will serve two distinct purposes; viz., (1) they will enhance official deniability, since the public is not yet prepared to believe their claims of mind-control experimentation; and (2) they will hasten the public's abandoning of privacy for the sake of safety. Prison inmates will be routinely targeted for experimentation. Those sociopathic and psychopathic prisoners who show the greatest potential for future social disruption will be the most likely to be paroled or to be allowed to escape before we proceed with Step 12, below.

"13. Mix the foregoing ingredients in calculated fashion until the order is given (in or around the late 1990s) to commence with Total Chaos. On that day, the order will be given to activate ALL directed-energy systems at maximum amplitudes, i.e., in office buildings, private residences, on the streets and highways, in psychiatric wards, in prison and jail systems, and in public establishments. Satanic cult members, who, until now, have been held in relative abeyance, will be given the order to concurrently run ram-

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Electromagnetic Exposure — A Secret Agenda? —

If proposed revised EMR safety standards are adopted, Australians and New Zealanders may soon legally be exposed to five times today's radiation levels, despite damning evidence that no level is actually 'safe' for health.

by Don Maisch

Extracted from his report

Non-Ionizing Electromagnetic

Fields and Human Health:

Are Current Standards "Safe"?

First published October 1994

Updated March 1995

Compiled for the Australian Democrats

3rd May 1995

Dear Editor,

I've been meaning to contact your magazine for several months now regarding the health hazards from microwave/radiofrequency (MW/RF) electromagnetic radiation (EMR).

My report deals with power-line frequencies (ELF), and covers some of the problems with RF/MW frequencies. Of special concern are current attempts by the Standards Association of Australia to increase existing maximum exposure limits for RF/MW radiation by a factor of five (times five).

The Standards Sub-committee met last week for a vote on whether to pass the proposals or not. The CSIRO [Commonwealth Scientific & Industrial Research Organisation]—a committee member and a strong opponent of increasing existing radiofrequency exposure levels—delivered a damning report which indicated that the existence of athermal (low-level) biological effects must be taken into account in setting exposure levels, and that the proposed DR95900 levels are dangerously high.

As a result of the CSIRO report and their scientific opposition to DR95900, Telecom and Optus (much to their credit) withdrew their support for the DR95900's increased limits and abstained from the final vote. They apparently stated, in light of the CSIRO report, that they saw no need to increase existing levels.

saw no need to increase existing levels.

However, the Department of Defence representatives on the Standards Committee voted in favour of increasing RF/MW exposure levels, so that when it came to the vote, of the 20 committee members, seven voted against and nine for, with four abstentions.

Dr Michael Rapicholi, committee chairman and architect of DR95900, considered a vote of nine out of 20 as approval, and succeeded in ramming the new standards through against much opposition. The relevant trade union representatives on the committee have indicated that they will actively oppose the adoption of DR95900 by the Australian and New Zealand governments.

In my conversations with several people involved with this particular committee, concerns were raised about a possible "secret agenda" in the insistent push to get these high limits approved by the committee.

approved by the committee.

After all, if Telecom and Optus see no need to increase existing limits, then why do "we" need significantly higher levels?—especially so, considering the significant hazards as mentioned by the CSIRO and in several other submissions to the committee.

It is possible that the push to raising safety limits is more to do with the development of future MW/RF technology than with existing communication systems. Our exposure to MW/RF radiation is increasing rapidly with the development and popularity of cellular/mobile phones, wireless communications, etc.

One such "brave new world" project which is of concern is a plan to surround the world with an array of low-orbit satellites which would be part of a global cellular phone system. With this system, mobile phone users can call anywhere in the world. Instead of the phone transmitting to a nearby phone tower, it would transmit directly to an overhead satellite positioned about 500 kilometres high.

Obviously such a phone would require more transmitting power than existing ones. So are present mobile phones "safe"? The following information may be of interest to mobile phone users and prospective buyers:

1. Studies have shown that 30 per cent of the radiated energy from the aerial of a mobile phone is absorbed directly into the brain of the user.

Two research studies on EMR at frequencies similar to mobile phone transmissions have shown it to cause DNA breakages in the brains of exposed rats.

The US Food and Drug Administration has advised mobile phone users to use them only when absolutely necessary and, when used, to make calls as brief as possible.

 Recent legal claims in the USA maintain that brain tumours may be caused by the use of digital cellular telephones.

I am currently collecting information for a report dealing exclusively with cellular (mobile) telephone systems and the health hazards implicated.

Looking forward to hearing from you,

Yours sincerely,

Don Maisch North Hobart, Tasmania, Australia

Report: "Non-Ionizing Electromagnetic Fields and Human Health"

[From the updated March 1995 report, "NON-IONIZING ELECTROMAGNETIC FIELDS AND HUMAN HEALTH: ARE CURRENT STANDARDS "SAFE"?" compiled by Don Maisch.]

7.0 THE OTHER SIDE OF THE COIN: WHAT THE "EXPERTS" SAY

In drafting its own guidelines for both residential and occupational exposure to ELF (50 Hertz) electromagnetic radiation, Australian regulatory authorities have taken their guidelines and standards from overseas expert groups, which are covered in this section. Current Australian exposure limits for ELF electromagnetic radiation are the same as the IRPA/INIRC limits (Section 7.3). For residential magnetic field exposures this is 1,000 milligauss; and occupational, 5,000 milligauss.

When questions are raised by concerned citizens or groups about EMF health hazards, Australian authorities such as the NH&MRC [National Health & Medical Research Council] and the ARL [Australian Radiation Laboratory] invariably refer to these expert groups as the ultimate authority on the issue. In fact,

Australian regulatory authorities apparently have uncritically accepted the conclusions and standards set up by these expert groups as "gospel"—not to be questioned.

It is certainly a necessity for any government policy decision-maker to seek expert advice on a wide range of issues. However, when it comes to the EMF/health hazard issue, the impartiality of these so-called expert groups is very much in doubt.

To put it bluntly, from my study of statements and decisions made by these expert groups, referred to in this paper, they seem to be 'factoring in' other concerns, such as political, economic and military vested interests, in their conclusions. This bias on the side of these expert groups has done much to cloud the fact that the evidence for significant biological effects from low-level electromagnetic fields is very strong.

In the following discussion of some of the major expert groups, the same problem arises in reference to standards covering the radiofrequency part of the electromagnetic spectrum—that is, they do not take into consideration low-level, non-thermal biological effects.

7.1 GREAT BRITAIN (NRPB)

In 1989 the British National Radiological Protection Board (NRPB), which has the responsibility for advising the government on the possible adverse health effects of both ionizing and non-ionizing radiation, released guidelines GS-11. These stated that the guidelines were for electric shock and heating effects only, and did not attempt to address low field-level (non-thermal) effects.

The NRPB stated that it did not consider there was sufficient evidence of such low field-level effects to include in their guidelines.%

In May 1992, the NRPB issued a progress report on their evaluation of the biological effects of low-frequency electromagnetic fields.

The NRPB said of the experimental studies so far:

"The available evidence weighs against electromagnetic fields

acting directly to damage cellular DNA implying that these fields may not be capable of initiating cancer...ⁿ⁹⁷

Official British Planning Policy Guidance on the development of telecommunications transmitting facilities is the PPG8. This document basically gives the go-ahead for most installations, stating that government policy is to facilitate the growth of the telecommunications industry, including cellular phones. Many commercial companies have been granted licences without the need even to apply for planning permission. Where they do need to apply, the PPG8 specifically states that "Radiation is a matter for the Health and Safety Executive (HSE) and not a matter for the planning system". 98

Considering that official British Government planning policy is to encourage the growth of the telecommunications industry, the NRPB's role as an impartial regulator in setting EM exposure limits is drawn into doubt, especially as they still refuse to consider low-field biological effects in setting their guidelines/standards.

An example of the NRPB's apparent bias in favour of the telecommunications industry at the expense of "safe" standards can be found in the March 1994 NRPB bulletin. Dr Kenneth

Duncan, the NRPB's medical adviser, in an editorial discussing the policy of Prudent Avoidance (which the British Government has rejected), stated:

"Prudent Avoidance may seem as an intellectually indolent term to avoid proper assessment of risk and benefits and to escape the opposition that positive decision-making sometimes provokes... If we are to come to sensible conclusions in times of scientific and technical advance, we must be prepared to have an underlying philosophy which accepts that some risks have to be accepted... some of these judgements may be unpopular but should not be avoided." [Author's emphasis added.]

This bias on the side of these expert groups has done much to cloud the fact that the evidence for significant biological effects from low-level electromagnetic fields is very strong.

7.2 THE USA (ORAU)

In 1989, the Oak Ridge Associated Universities (ORAU) was commissioned by

the Committee on Interagency Radiation Research and Policy Coordination (CIRRPC) to establish a panel to conduct an "independent" scientific review, and evaluation of the reported health hazards of exposure to extra low frequency electromagnetic fields, especially those related to cancer and to reproductive and neurophysiological effects.

In 1992 this panel concluded that:

"This review indicates that there is no convincing evidence in the published literature to support the contention that exposures to extremely low-frequency electric and magnetic fields (ELF/EMF) generated by sources such as household appliances, video display terminals, and local power-lines are demonstrable health hazards. Epidemiological findings of an association between electric and magnetic fields and childhood leukemia or other childhood or adult cancers are inconsistent and inconclusive. No plausible biological mechanism is presented that would explain causality. Neither is there conclusive evidence that these fields initiate cancer, promote cancer, or influence tumor progression. Likewise, there is no convincing evidence to support suggestions that electric and magnetic fields result in birth defects or other reproductive problems. Furthermore, any neuro-behavioral effects are like-

ly to be temporary and do not appear to have health consequences."

The ORAU panel, not content to let the issue die there, 'nailed the final nail into the coffin' with the following ending:

"This review does not provide justification for a major expansion of the national research effort to investigate the health effects of ELF/EMF. In the broad scope of research, any health concerns over exposures to ELF/EMF should not receive a high priority."100

The independence of the ORAU panel is severely compromised by the fact that J. Glenn Davis, Chairman of the Medical Sciences Division of ORAU, and who headed the panel, was previously a senior US Air Force commander who retired from active duty in 1990 to take up his position at ORAU. The US Air Force has played an active role in opposing EMF research. (See Section 1.5 The 1990 EPA Report, and Section 7.6, page 33, reference 110).

Another possible military connection with the ORAU panel was the fact that they excluded the scientific literature and standards relative to all higher frequencies in the electromagnetic spectrum above 30 KHz, thereby excluding radio, microwave and radar frequencies which the military is obviously heavily reliant on.

7.3 IRPA/INIRC INTERIM GUIDELINES 1990

The International Radiation Protection Association and its committee, the International Non-Ionizing Radiation Committee (IRPA/INIRC) had the responsibility for the development of health criteria standards for non-ionizing radiation. Their standards form part of the World Health Organisation's Environmental Health Criteria Programme and has been adopted by the Australian Radiation Laboratory and the National Health & Medical Research Council as the standards for Australia.

To quote from their guidelines:

"From a preview of the scientific literature, it is apparent that gaps exist in our knowledge, and more data needs to be collected to answer unresolved questions concerning biological effects of exposure to these fields (EMF). On the other hand, analysis of the existing literature does not

provide evidence that exposure at present day levels has a public health impact which would require corrective action.

"A cost-benefit analysis taking into account national public health priorities and consideration of economic impact and social issues may be necessary to derive limits suited to the conditions prevailing in different countries." [Auth. emph.]

The exposure limits for magnetic fields are as follows:

Limits of Exposure to 50/60 Hertz magnetic fields

I. Occupational—Magnetic Field Intensity
Whole working day 5,000 milligauss
Two-hours-per-day limit 50,000 milligauss
For limbs 250,000 milligauss
II. General Public (Residential)—Magnetic Field Intensity

24 hours per day 1,000 milligauss Two-hours-per-day limit 10,000 milligauss

When you consider that the magnetic field levels indicated as having adverse health effects in the studies listed earlier are in the range of 1 to 4 milligauss, there is cause for concern, to say the least.

Why this discrepancy? It is hard to believe, but all the studies

indicating adverse health effects were apparently not considered by the IRPA/INIRC when setting the standards. They admit this in their concluding remarks:

"The exposure limits are based on established or predicted effects of exposure to 50/60 Hz fields. Although some epidemiological studies suggest an association between exposure to 50/60 Hz fields and cancer, others do not.

"Not only is this association not proven, but present data does not provide any basis for heath risk assessment useful for the development of exposure limits." [Auth. emph.]

Further on in the IRPA/INIRC interim guidelines, they state: "To date, chronic low-level exposure to 50/60Hz fields has not been established to increase the risk of cancer". 101

7.4 THE INTERNATIONAL COMMISSION ON NON-IONIZING RADIATION PROTECTION (ICNIRP)

The ICNIRP took over from the previous IRPA/INIRC committee as standard-setter for non-ionizing radiation. To quote from their press release of 12 May 1993:

"The International Commission on Non-Ionizing Radiation Protection (ICNIRP) reviewed the data about possible carcinogenicity of power-frequency magnetic fields at its first annual

...they excluded the

scientific literature and

standards relative to all

higher frequencies in the

spectrum above 30 KHz,

thereby excluding radio,

microwave and radar

frequencies which the

military is obviously

heavily reliant on.

electromagnetic

meeting on May 7-12, 1993, held in Neuherberg, Germany. This review considered all scientific data that have been published or publicly presented since the "Interim Guidelines on Limits of Exposure to 50/60 Hz Electric and Magnetic Fields" were published in 1990 by the predecessor International Non-Ionizing Radiation Committee (INIRC) of the International Radiation Protection Association (IRPA). The major reason for the interim nature of these guidelines was the inability to arrive at a scientifically-based judgement concerning any causal relationship between 50/60 Hz magnetic field exposures and the excess occurrence of cancer.

"The most recent data reflect some improvements in methodology in laboratory studies and in epidemiological studies of both occupational and general populations.

After careful consideration of this evidence, the Commission concludes that the data related to cancer do not provide a basis for health-risk assessment of human exposure to power-frequency fields. Accordingly, the Commission confirms the interim guidelines published in 1990 (IRPA/INIRC 1990)." [Auth. emph.]

7.5 THE AUSTRALIAN RADIATION ADVISORY COMMITTEE—AND THE THERIAULT STUDY

In September 1994, in the Annual Report of the Radiation Advisory Committee, the RAC gave their version of the outcome of the French/Canadian study of electrical workers, known as the Thériault study. To quote from their report:

"A combined French/Canadian occupational study was published this year. The study looked at whether workers in three electricity utilities with exposure to higher levels of magnetic fields had a higher incidence of cancer in the study period 1970-1989. The study provided no conclusive evidence of a link between occupational exposure to power-frequency magnetic fields and cancer, and there was little or no consistency between the three utilities studied." [Auth. emph.]

Of the thousands of research papers on EMF health effects dating back to the 1970s, none has found conclusive evidence.

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Conclusive evidence in relation to health issues only comes about by comparing a large number of individual studies to build up a case, such as was done with tobacco smoking. Sir Richard Doll (NRPB) himself admitted this about the smoking issue. It is very unscientific to use this term in relation to only one study.

As for the Thériault study, its results are similar to findings from previous studies. That is, positive associations between ELF magnetic field exposure and a number of cancer types were indicated, with associations being strongest for leukaemias, followed by brain cancers.¹⁰⁴

In a further analysis of the Thériault study by Dr Gilles Thériault and his team at McGill University, high-frequency transients (HFTs) and worker exposure were studied. Results showed up to a tenfold increased risk of developing lung cancer among highly exposed utility workers and a "very clear" exposure-response relationship.

This second analysis by Thériault has resulted in Hydro-Quebec (which owns the data collected by Thériault) barring Thériault and

his team from further access to the data.¹⁰⁵ This is the kind of thing which can happen when vested interests, such as power companies, fund research.

To find an "expert" group such as the Radiation Advisory Committee giving such an inaccurate report on the Thériault study is cause for concern.

This inaccurate reporting is perhaps understandable considering (quoting from the Victorian Government's "Report of the Panel

on Electromagnetic Fields and Health", September 1992):

"To date, the responsibility for communicating with the community about ELF fields has rarely been clearly defined, and most information is developed and disseminated by the utilities, as health authorities have not considered ELF fields as an important health matter." [Auth. emph.]

It is inadvisable just to depend upon the electric power suppliers to pass on information to the public or health authorities, for results can be altered to suit their vested interests.

To get to the real issues involved in the EMF/health hazards debate, it is necessary to look past the "expert" groups and study the large body of scientific literature on the subject. This is a very complicated area which is made more complicated by the fact that the present situation on environmental electromagnetic fields involves highly polarised opinions.

8.0 CONCLUSION

Current Australian regulations on human exposure to electromagnetic radiation are based on the ICNIRP/INIRC guidelines mentioned above, which, in part, state: "analysis of the existing literature does not provide evidence that exposure at present-day levels has a public health impact which would require corrective action". [Auth. emph.]

However, considering the studies and weight of the evidence of human health hazards, the consistency of these reports and the seriousness of the diseases implicated, it is now unacceptable for Australian Government agencies responsible for advising and setting standards to continue to base their recommendations on outdated guidelines which are no longer appropriate in light of the evidence.

In contrast, the European Parliament has taken a strong progressive stand on limiting EMF exposure by adopting a resolution, titled "On Combating the Harmful Effects of Non-Ionizing Radiation".

This resolution recognises that "the difficulty of demonstrating a

relationship between dose and effect, enabling the effect of nonionizing EMFs to be quantified...does not prevent the adoption of legislative measures designed to minimise the exposure of workers and the public".

The European Parliament resolution takes seriously the health hazards from electromagnetic radiation. To quote in part from the resolution:

"...according to an increasing number of epidemiological and experimental studies, even slight exposure to non-ionizing electromagnetic fields increases the risks of cancer, can be accompanied by nervous disorders and disruption of the circadian rhythms and seems capable of affecting developing organisms...

"...the results of many in vivo and in vitro studies show increasingly clearly that the interaction mechanisms underlying such disorders and illnesses, centred mainly in the cell membrane, lead to disruption of melatonin secretions, ornithine decarboxylase activity and T-lymphocyte efficacy, testifying to the probable role of non-ionizing radiation in promoting cancer...

"...synergy phenomena must be expected between non-ionizing radiation and other physical or chemical agents."

Footnote:

- 96. Electromagnetics and VDU News, July/Dec 1993.
- 97. "Are Powerlines Bad for You?", New Scientist, 11 April 1992, pp. 22-23.
- 98. Electromagnetics and VDU News, July/Dec 1993.
- 99. Radiological Protection Bulletin, NRPB, March 1994.
- 100. "Health Effects of Low-Frequency Electric and Magnetic Fields", Environmental Sciences Technology,
- vol. 27, no. 1, 1993, pp. 42-51. 101. *Health Physics*, vol. 58, no. 1, January 1990, pp. ll3-122.
- 102. ICNIRP Press Release, 12 May 1993.

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vested interests.

- "Annual Report of the Radiation Advisory Committee", Radiation Safety Section, Department of Health and Community Services, Australia, September 1994.
 MacMillan, Ian, "Interpreting Thériault: An Independent Assessment of the
- Canadian-French EMF Cancer Study", June 1994.
 105. Microwave News, November/December 1994.
- 106. "Report of the Panel on Electromagnetic Fields and Health" to the Victorian Government, September 1992.
- 107. Microwave News, January/February 1994
- 108. Microwave News, September/October 1994.
- 109. Microwave News, May/June 1994.
- 110. Microwave News, September/October 1992.
- 111. Microwave News, July/August 1994, pp. 13-15.

For further information on power-line issues, field measurements, strategies, etc., contact:

Australia: • Powerline Action (Vic.) Inc./EMF Advice—lan MacMillan, 3/247 Flinders Lane, Melbourne, Vic. 3000; phone (03) 654 4512, fax (03) 650 3689. • Association of Citizens Against Telecommunication Towers (ACATT)—Kate Barrett, 2/91 Henley Beach Rd, Henley Beach South, SA 5022; phone (08) 356 4408.

New Zealand: • Adopt Radiation Controls, Inc. (ARC)—c/- Bruce Morrison, PO Box 21113, Henderson, Auckland. • Environmental Protection for Children Trust (EPC)—393 llam Road, Christchurch; phone +64 3 351 7329, fax +64 3 343 3693.

<u>Canada</u>: • PACE Canada—100 Bronson Ave, #1001, Ottawa, Ontario KIR 6GH; phone +1 (613) 236 6265, fax +1 (613) 235 5976.

Sweden: • FEB (Association for the Electrically and VDT Injured)—Box 115126, 104 65 Stockholm; ph+46 (8) 712 9065, fax +46 (31) 83 3509.

<u>UK</u>: • London Hazards Centre—Interchange Studios, Dalby Street, London, NW5 3NQ. • PowerWatch UK—c/- 2 Tower Road, Sutton, Ely, Cambs, CB6 2QA.

<u>USA</u>: • National EMR Alliance—410 West 53rd St, #402, New York, NY 10019; phone +1 (212) 554 4073, fax +1 (212) 977 5541.

Non-Ionizing Electromagnetic Fields and Human Health: Are Current Standards "Safe"? (ISBN 0-646-224050)

This Report, written and compiled by Don Maisch, is available from the author at PO Box 96, North Hobart, Tasmania 7002, Australia. Price: AUD\$10.00 inc. p&h in Aust; AUD\$11.50 airmail to NZ; AUD\$14.00 airmail to Canada/Europe/UK/USA.

Draft Standard 95900: Maximum Exposure Levels 3 KHz to 300 GHz

7.6 AUSTRALIA/NEW ZEALAND DRAFT STANDARD 95900—MAXIMUM EXPOSURE LEVELS 3 KHz TO 300 GHz

(This draft standard, a proposed revision of an earlier standard (AS/NZS 2772.1), deals with exposure levels in the radiofrequency/microwave part of the electromagnetic spectrum. This draft was issued for comment on 1st February 1995 and closed on 15th March 1995.

The following is taken from a letter sent to Standards Australia by Senator Robert Bell of Tasmania and this writer.)

Mr McAlpine Standards Australia PO Box 1055 Strathfield NSW 2135

14th March 1995

Dear Mr McAlpine

I am writing to you to express several concerns about the implications of the "DR95900 Radiofrequency Radiation, Part I: Maximum Exposure Levels 3 KHz to 300 GHz".

If these proposals are accepted by the Australian and New Zealand governments, the general and working populations can legally be exposed to <u>five times</u> the current levels of radiofrequency radiation in the communications frequency. This includes microwave transmissions from telecommunication towers, cellular phones and their transmitters and radar transmitters.

These new limits, if accepted, will inevitably lead to significant increases in transmitting power levels by all users of the radiofrequency spectrum. It is these same users (vested interests) who are overwhelmingly represented on this drafts committee.

There has been almost no input from community groups and EMR scientists or medical experts not associated with these vested interests.

The reasoning or 'basic philosophy' used by the committee to come up with this fivefold increase is also of concern.

If I may draw your attention to paragraph 4 in the preface of this draft (page 2), to quote in part:

"that when only the established scientific literature is used, exposure limits can only be based on thermal effects in the frequency range about 10 MHz to 300 GHz. The scientific literature shows that, while non-thermal exposures may cause very minor perturbations to biological systems (isolated cells or tissues, but not in humans), there has not been found any adverse health impact from these exposure levels after almost 40 years of research." [Auth. emph.]

As stated in the preface, the DR95900 is based on

the IRPA Guidelines and the USA IEEE C95.1-1991 Standard. In fact, the DR95900 and IEEE C95.1 are essentially setting the same limits, based only on thermal effects.

In November 1993, the US Environmental Protection Agency (EPA) came out strongly against the US Federal Communications Commission's proposal to adopt the IEEE C9S.1 standard on RF/MW exposure, contending that the standard has "serious flaws". The EPA questioned whether it is "sufficiently protective of public health and safety". The EPA criticised in particular the standard's different limits for controlled and uncontrolled environments and the failure to consider nonthermal effects. 107

In 1993, the Phillips Laboratory at Kirtland Air Force. Base in New Mexico came out strongly for the existence of non-thermal RF/MW health risks.

Dr Cletus Kanavy, a bio-effects researcher at the Phillips Lab, authored a White Paper on the biological effects of RF/MW radiation in which he concluded that "a comprehensive search of the worldwide literature" found that "a large amount of data exists...to support the existence of chronic non-thermal effects".

Dr Kanavy also noted in the White Paper that "The literature published in the late 1980s is abundant with information on non-thermal effects which are produced at levels below the ANSI standards." In the ANSI/IEEE C95.1 standard, he added, "The existence of non-thermal effects is essentially denied by omission". [Auth. emph.] A copy of the White Paper is attached to this letter.

The US National Institute for Occupational Safety and Health (NIOSH) has also raised objections to the ANSI/IEEE C95.1 guidelines for basing exposure levels solely on thermal effects. ¹⁰⁹ [Auth. emph.]

Dr Ross Adey, a leading researcher into EMR bioeffects, based at the VA Hospital in Loma Linda California, criticised the US Air Force for maintaining that EMR cannot cause non-thermal effects.

At a hearing before a US Senate Subcommittee in August 1992, Adey testified that "As a matter of policy, the Air Force denies existence of biological effects, attributable to athermal fields. Nevertheless, evidence for athermal bioeffects is incontrovertible for both low frequency and RF exposures". " [Auth. emph.]

The above criticisms of the US standards apply equally well to the DR95900, which is largely based on the American IEEE C95.1 standard mentioned above and only considers thermal effects. In light of the facts, to continue on this path of avoidance and omission is just the opposite of a proper scientific approach. It is a bit like the flat-earth controversy back in Galileo's time.

Paragraph 4 in DR95900 totally discredits the document's scientific validity due to its refusal to take athermal bio-effects into consideration, and its apparent ignorance of a large body of research. As such it should be rejected by both the Australian and New Zealand governments.

10.0 "Biological Effects of Microwave Radiation: A White Paper"

The White Paper reproduced below was written by Dr Cletus Kanavy, chief of the Biological Effects Group of the Phillips Laboratory's Electromagnetic Effects Division at Kirtland Air Force Base, NM, in October 1992. The references at the end of Kanavy's paper are omitted here.

The biological effects of microwave radiation on living organisms have been the subject of extensive research for the past four decades. The most comprehensive programs were conducted by the Soviet and Eastern Bloc nations. The US has lagged behind badly in this area of research. Initially, the principal concern for human exposure to microwave radiation was that of thermal heating of the tissues. Permissive exposure limits were based on such criteria. Since the 1970s this limit has been progressively set at lower levels of average field power density for the classical six-minute time average period. These limits, which are published as the American National Standards Institute (ANSI) microwave standards, are actually derived by the Institute of Electrical and Electronics Engineers (IEEE). Under IEEE, a blue-ribbon panel of experts periodically reviews the research database and assesses the need to revise the standards. Until 1991, these standards did not consider the possible biological effects of "pulsed" microwaves. The 1991 standards do address the pulse condition (rather shabbily, I believe), place restrictions on the number of pulses per six-minute time period as a function of pulse width, and continue to use the continuous wave time averaging technique for thermal criteria. The existence of nonthermal effects is essentially denied by omission.

The US research community was aware of the Soviet findings of deleterious biological effects at exposures well below the ANSI standards. The Soviet findings were rejected for various reasons. The principal reason was that US attempts to duplicate the Soviet results were reportedly not successful. It was not until the mid-1980s that US researchers began to successfully duplicate Soviet experimental results and began a research program to expand upon and further test the Soviet nonthermal theories.

Since March 1991, we have been conducting a comprehensive search of worldwide literature on the results of experimentation regarding biological effects produced by microwave radiation. The results of this search have been consolidated into a computerized database which we have shared with the Armed Forces Medical Intelligence Center and the Central Intelligence Agency. We attempted to share the database with the Armstrong Laboratory. A list of the holdings in the database was presented to Dr Dave Erwin of Armstrong who proceeded to 'line-out' the publications of researchers he believed not to be credible. These were researchers who were reporting the positive existence of nonthermal effects.

The literature published in the late 1980s is abundant with information on nonthermal effects which are produced at levels below the ANSI standards. These are essentially chronic exposure effects at low levels of average field power densities. Researchers stress the chronic,

nonthermal nature of these effects as opposed to acute exposure thermal effects. Ample experimental evidence exists from credible researchers from well-established and highly regarded institutions, both government and university, to justify a national research program into the full spectrum of biological effects of electromagnetic radiation.

The principal electromagnetic biological effects of greatest concern are behavioral aberrations, neural network perturbations, fetal (embryonic) tissue damage (inducing birth defect), cataractogenesis, altered blood chemistry, metabolic changes and suppression of the endocrine and immune systems. The verification of blood-brain barrier suppression should have a high priority. The passage of normal blood-borne toxins into the brain could explain some previously observed early behavioral aberrations, loss of physical endurance, and functional central nervous system and perceptual changes. A large amount of data exists, both animal experimental and human clinical evidence, to support the existence of chronic, nonthermal effects. The Soviet studies of humans under occupational conditions report marked functional changes, sometimes accompanied by histological and biochemical changes, under the chronic influence of microwaves at power densities ranging from fractions of microwatts to a few milliwatts per square centimeter. Research to date has concentrated on determining the psychological/physiological effects (changes) produced by electromagnetic fields of various power densities, carrier frequencies and modulation rates. These results are the macroscopic part of the issue. The microscopic part of the issue urgently needs to be addressed-namely the physical mechanisms behind the various observed biological effects. Various theories and interaction models exist to explain, in a limited way, some of these physical mechanisms for specific effects. None have yet been positively verified. This is believed to be a key issue which needs to be addressed as soon as possible...

Other areas of concern center on the uninvestigated human response to high-peak, low average power, moderate-to-high-pulse repetition frequency microwave fields. The relationships between these variables and specific human responses should be of prime importance to the directed energy weapon (DEW) development programs. The ability of certain modulation frequencies imposed on various carrier frequencies to affect (lock onto) circadian rhythms poses a formidable research problem. A principal question raised is the existence of "frequency windows" and resonances associated with certain physiological and psychological responses. The past several issues of Bioelectromagnetics have contained many articles by prominent US researchers which report nonthermal effects. New concerns are also forthcoming, i.e., bio-effects of ELF and electromagnetic fields in close proximity to highvoltage power lines and transformer banks. Thus the entire issue of human interaction with electromagnetic (RF & microwave) radiation is pushing forward as a major national population health concern.

(Reprinted from Microwave News, Sept/Oct 1993)

— Kombucha — The Miracle 'Fungus'

Praised in Asia for millennia for its health-promoting properties, the Kombucha brew's growing popularity worldwide is no mere storm in a teacup!

© 1994 by Harald W. Tietze

Extracted with permission from his book Kombucha—The Miracle Fungus Published by Gateway Books, UK (2nd ed. 1995)

ORIGIN OF THE KOMBUCHA 'FUNGUS'

o one can say, for sure, how and where the Kombucha fungus originated, but we do know that it has been used for at least two thousand years. It does not really matter whether the Chinese, Koreans, Japanese or Russians were the first to ferment the fungus. To be exact, it isn't really a fungus as such, but rather a community of yeast and bacteria. One authority describes it as a lichen. The origin of the name could be Japanese, with *kombu* standing for the brown tea algae and *cha* for tea. The best description, in my opinion, is that of the herbalist, Pastor Weidinger, whom I have used as a source throughout this book. He says:

"Kombucha tea is an ancient East Asiatic beverage which came out of the ocean... For three years I was a missionary on the island of Taiwan... This south-eastern coastal region with its subtropical climate and extended growing period made ideal conditions for growing the tea, which was farmed in large areas. This province is regarded as the origin for "tea", i.e., in Latin, Thea. The original name given by the Chinese writer Kuo-Po to the beverage extracted from these leaves was Tu or Tschuan. Today it is called Ch'a. In the province of Fukien, however, it is still called T'e. This has given me a closer understanding of the word tea. K'un-Pu-ch'a, a tea-like wine...

"My missionary activities also required my travels to the islands of Quemoi and Matsu which are situated close to the mainland near the Province of Fukien. I was very impressed by a beverage which was served to me by the local people which had a sweet-sour taste and was very refreshing in the hot climate of the area. Was it wine which tasted like a delicious tea or an unusual tea that tasted like a rare wine? Notably, after drinking this beverage, I not only felt stronger after the long and tiresome walk but, strangely enough, felt healthier. In particular it helped my metabolism a great deal in this climate and made me feel very relaxed. When I asked what it was, K'un-Pu-ch'a came the reply. I was startled. "Tea which came from life in the ocean"?

"Already in the Tsin-Dynasty, about 221 BC, it was known and honoured as a beverage with magical powers enabling people to live forever. The tea was given different names. One of the most famous was the "Godly Tsche". This particular tea was used as a remedy for chronic gastritis. People also tell of the Korean medicine man named Kom-bu who, in the year 414, prescribed the tea to heal the Japanese Emperor's disorders. The "Godly Tsche" came from China, via Korea to Japan where it was given the name "Tsche of Kombu"."

KOMBUCHA RESEARCH IN THE WESTERN WORLD

The most famous research results come from the University of Omsk in Russia and, in the West, from the research of Dr Rudolf Sklenar. Dr Sklenar's research is often mentioned in the German press. He came from Eastern Germany where Kombucha has been used since the turn of the century among ordinary people. He studied medicine in Prague and had his first contact with the Kombucha fungus in a monastery. He worked with the culture during the Second World War and based his scientific work upon Kombucha. In the 1960s he published his research in the scientific and general press, which resulted in increased awareness of Kombucha's healing and strengthening properties. Dr Sklenar used Kombucha successfully for diabetes, high blood pressure, all types of digestive problems, stomach and bowel illnesses, rheumatism and gout.

Dr Sklenar's main area of work became the biological treatment of cancer, and he integrated Kombucha with this programme. His healing methods were so successful that they were adopted by many doctors. A company which carries his name today manufactures the Kombucha beverage and Kombucha drops. When it was reported that Dr Veronika Carstens (wife of a former German President) was using Kombucha with all her cancer patients, the fungus beverage became a popular healing remedy. Dr Sklenar and Dr Carstens recommended the use of Kombucha to their cancer patients as a complement to other therapies.

KOMBUCHA—FACT OR FICTION?

Reports dealing with healing successes are often generalised and passed on without the desired research. With medicinal herbs, for instance, the general perception is that they can only heal and do not have any negative side-effects. In fact, what is a health remedy for some may prove to be quite the opposite for others. When I first received the Kombucha fungus from a friend, I was given an information leaflet about Kargasok tea.

"Kargasok Tea:

Approximately 60 years ago, a Japanese woman visited the region of Kargasok (in Russia) and was stunned to find so many healthy people who were over the age of 100. She actually met a man at the age of 130 who had married an old woman of over eighty who was still able to conceive children. The Japanese woman was fascinated by this and attempted to obtain the secret of the eightyyear-old woman who hardly had a wrinkle. She discovered that in every household, young and old alike consumed approximately 1/2 pint (US) or one-third litre of

Kombucha tea each day. To make this tea, the Japanese woman received a special yeast fungus and instructions on how to use the fungus. She took the fungus with her to Japan where she started to duplicate it. Her friends were invited to drink the tea as well and she also passed the fungus on to them with instructions on its use. They passed it on to their friends. After having consumed the tea for a period of time, the people began reporting successful effects:

- A man with a blood pressure of 210/120 was able to reduce it to 140/80.
 - · A young girl diagnosed with shingles was cured .

"In Kargasok, cancer and high blood pressure are unknown. In Japan, soon after this tea became the subject of TV and radio programmes, well over one million Japanese were consuming the tea. Eventually the tea found its way to Taiwan, then to Hong Kong and now travels around the world where it is passed on from one friend to another as a token of appreciation and love. This tea appears to be a miraculous remedy for many types of suffering. Researchers have discovered that the fungus has three basic elements, without which the body cannot function. Encouragingly, Dr Pan Pen from Japan reported as follows on the effects of the culture:

"This tea:

- · clearly lengthens the lifespan
- is a health remedy against chicken pox and shingles
- · reduces the formation of wrinkles

- · discourages the formation of cancer
- · prevents adverse menopausal symptoms
- · restores visual acuity
- · strengthens leg muscles
- · heals arthritis
- · enhances sexual drive
- · heals sweaty feet, constipation, joint and back pains
- heals abscesses
- · heals blocked arteries and diabetes
- · strengthens kidneys
- · heals cataracts and heart disease
- · restores the appetite and heals sleeping disorders
- · reduces the chance of gallstones and liver problems
- · reduces obesity and stops diarrhoea
- heals haemorrhoids

"...it is passed on from one friend to

another as a token of appreciation

and love. This tea appears to be a

miraculous remedy for many types of

suffering. Researchers have

discovered that the fungus has three

basic elements, without which the

body cannot function."

· helps restore colour to grey hair; helps baldness conditions.'

This list may appear naive, and there is no record of the type of teas that were used, nor whether the tea brew or the fungus itself

was being used. One cannot gener-

alise about these conditions: one individual may be helped, another not. Wrinkles, for example, may be helped more by rubbing pulp on the face. There is evidence that Kombucha helps restore hair. As for preventing hair greying, it has not worked for me but perhaps may work for others.

WHAT IS KOMBUCHA?

Kombucha is composed of a number of bacteria and special yeast cultures in a symbiotic relationship. This living organism ferments sweetened tea to become the Kombucha beverage. The refreshing taste gives one a

feeling of well-being. The amount of living yeast it contains gives the Kombucha beverage an active life which continues after decanting it into bottles. Kombucha has become increasingly highly regarded as an aid to preventing many illnesses.

HOW TO MAKE YOUR OWN KOMBUCHA

Ingredients (Metric/Imperial measurements):

2 litres (3-1/2 to 4 pints) boiling water

160 grams (5-1/2 ounces) of white granulated sugar

2 to 4 teaspoons (or tea bags) tea—black, green, or a mixture

1 healthy Kombucha culture

2 tablespoons vinegar (This is used only with the first brew, if no starter Kombucha tea is available. In subsequent brews, use 200 ml (1/3 pint) of the brew as a starter and omit vinegar).

Alternatively, a herbal tea—though not one that contains oil—may be used. (You need to be sure that the herbs: have been properly dried and stored without risk of spore or instal contamination. Those containing appreciable at nounts of oil are: angelica, bergamot, camomile, caraway, curtin, dill, fennel seed, lavender, lovage, marjoram, mint, peppermint, rosemary, tarragon, thyme, wormwood.) We recommend you start brewing with black and/or green tea. When you are more confident you can experiment with herbs.

In this case, use 2 to 3 teaspoons of herbal tea, pour on boiling water, leave for 5 minutes, strain off tea leaves (or remove tea bags) and proceed with recipe below.

Ingredients (USA measurements):

10 cups (4 to 5 US pints) boiling water

3/4 cup white granulated sugar

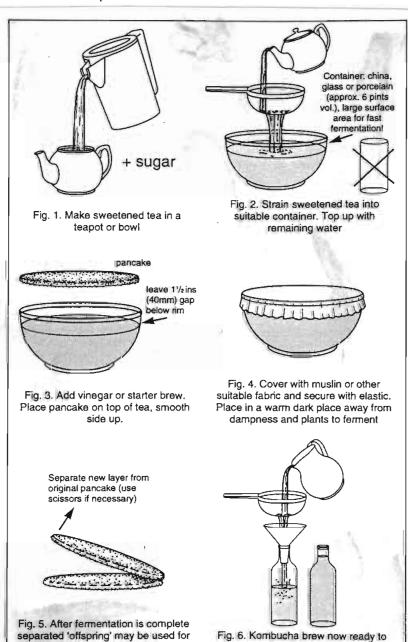
2-4 teaspoons (or tea bags) tea-black, green, or a mixture

1 healthy Kombucha culture

2 tablespoons vinegar (This is used only with the first brew, if no starter Kombucha tea is available. In subsequent brews, use 1 cup (1/2 pint approx.) of the brew as a starter and omit vinegar).

Method:

To make a batch of Kombucha, you will need a bowl made of china, porcelain, glass or ceramic that will hold about two and a half litres or six pints.



drink. Strain into glass bottles or jugs

and store in fridge - enjoy!

Place the tea in a large pot, pour on boiling water, add sugar and stir until dissolved, then leave to brew for 10 to 15 minutes. Strain brewed tea into the bowl. Add the remainder of the water and the vinegar (or 'starter' brew) and allow to cool, if necessary, to room temperature.

Wash the Kombucha fungus and place on top of the water. The mushroom has a smooth side (possibly lighter in colour) and a rougher side. It should be allowed to float smooth side upwards. A gap of at least one-and-a-half inches should be left between the fungus and the top of the bowl.

Cover with muslin (or some other suitable cloth which will allow air through) and anchor this below the lip of the bowl with elastic.

The container should then be stood in a warm place (ideal fermentation temperature is between 70° and 84°F (23° and 28°C), depending on the season). The fungus does not require any light but needs warmth and air. Smoke is harmful.

After six to nine days of fermentation (it is faster in summer or in higher temperatures), remove the fungus with clean hands, strain the beverage and pour into bottles (Alternatively, if preferred, pour the the beverage into one or more lidded jugs). After some experience you will decide the best fermentation time for your conditions. The drink should have a zingy and slightly sweet taste, not too acid.

The bottles should be placed in the fridge, otherwise the fermentation process will continue and the beverage will obtain a sour taste. Once the fungus has been removed from the tea brew, it can immediately be used to start a new batch.

The most suitable containers for brewing are bowls made of glass, porcclain or glazed pottery. Metal containers—including stainless steel—are not used because acids in the brew react with the metal. A comparison can be made with whisky or wine which taste different when fermented in wood. Plastic containers are more and more commonly used, in which case they should be high quality food-grade and acid-resistant. Polyvinyls, polypropylenes and cheap plastics can cause chemical reactions in the brew. Beer-brewing containers used for home brewing can be used. The containers should have a wide opening and be not too tall nor filled up to the top. A wider, more shallow pot enables the Kombucha to ferment quicker and better.

THE 'FUNGUS' REPRODUCES ITSELF

With each brew, a new fungus will have grown (by binary fission) on top of the original 'pancake' floating on top of the liquid. The pancakes can be parted easily (if in difficulty, use a clean pair of scissors to gently ease away). This can then be used to start another batch or to pass on to a friend.

If no batches are started on the same day, the fungus can be preserved by placing it into an airtight container with some Kombucha beverage and keeping it in the fridge until required.

The recommended amount to drink daily is three average-sized wine glasses, one before breakfast and one 20 to 30 minutes after lunch and your evening meal. Larger amounts can be consumed quite safely. There are no limitations to the ways in which a Kombucha brewer can experiment with this beverage.

new brew, stored in fridge or passed

on to a friend

CONTINUOUS FERMENTATION PROCESS

After I first wrote about Kombucha, I received a mass of comments and enquiries from people in Eastern and Middle Europe. These people recalled their mothers or grandmothers having a large container of between 10 to 20 litres (3 to 4 US gallons) stored in a warm place.

People drank the brewed beverage when required, and every now and again the container was refilled with 4 to 5 litres (10 to 12 US pints) of sweetened tea. This was one form of continuous fermentation. Different top-ups can be made with different teas. Children, for instance, often love a mix made with wild blackcurrant herbal tea. I have never heard of any problems with this type of fermentation.

On reading about this, I immediately purchased a large container with a tap located several centimetres above the base so that it would not discharge the yeast sediment from the bottom. I discovered that Russian and Polish workers had brought this process with them into the Eastern regions of Germany. Some war refugees also brought this process with them to the West.

Continuous fermentation, besides being easier, also has the advantage that a larger amount of fluid does not react as quickly to temperature variations.

A large container can also be equipped with heating plates as used with the fermentation of beer. In my experience, I must say that the continuous fermentation process is the ideal way to brew Kombucha for personal use.

SOME FREQUENTLY-ASKED QUESTIONS ABOUT BREWING KOMBUCHA

Q: How long should I have to wait to drink my Kombucha?

A: A week from brewing is an average time. Six to eight days after storing your covered bowl of Kombucha, taste the tea. It should be neither too sweet nor too sour. If it is too sweet, allow the mushroom to ferment for another day or so. If the taste is rather sour, then leave the next brew for one day less. You may still drink the tea—it will be very good for you, though you may like to add some spring water or fruit juice!

Q: What is the correct temperature for the mushroom?

A: The Kombucha mushroom likes the sort of temperature used in wine or brew fermentation. For that reason, if your room is cold (in winter, for example), it might be useful to use a heated brewing mat or thermal collar. These can be purchased from most brewing shops. In summer, average daily room temperatures will be fine.

An airing cupboard is a popular place in which to place the brew. However, if the hot water tank is not well-insulated, the temperature will be a little high.

Q: How do I know if it is working?

A: Firstly, don't be surprised if the mushroom sinks to the bottom. It generates carbon dioxide under its surface as it transforms the tea and may need a while to build up sufficient gas and buoyancy to float back to the surface. After a few days, you should notice a smell of vinegar and the formation of a transparent membrane on top of the tea surface. If this occurs, all is well.

Q: What happens if I damage the mushroom?

A: The mushroom is very hardy and will still produce a well-formed offspring, even if torn or partly-formed. The offspring

may be thinner over the damaged area, but the thinner area will get thicker with successive generations. If the accumulated gas under the mushroom pushes the thin part of the mushroom membrane away from the tea surface, you may lift the mushroom to allow the gas to escape. This will bring the thinner membrane back into contact with the liquid surface and will encourage a more uniform growth.

Q: What happens if I go on holiday for a while?

A: The Kombucha mushroom is a hardy beast and will sleep quite happily in a little of its tea fluid for three to six months when left in the refrigerator. It's best to lay it out flat and make sure that it has a little air in the container so that it can breathe.

Q: How do I produce more mushrooms for my friends?

A: A Kombucha will happily produce offspring in just a small (half an inch or so) amount of tea. So, in this way, you can produce more offspring without using lots of sugar and tea and without having to generate large amounts of Kombucha tea. The resulting Kombucha tea may be a little too sour to drink, however, so prepare at least one batch with the usual amount of liquid.

Once you have a number of mushrooms, it is possible to refrigerate them successfully, stacked in a container with a little fluid in the bottom. Kombucha offspring do not fight—they live very happily together! All the mushrooms may be kept active by brewing from them in rotation. In this manner, you will always have a number of healthy, active mushrooms to give away on request.

Q: What effect will drinking the tea have on my health?

A: The effects of drinking the tea vary from person to person. In general, however, the tea acts in a gentle,

balancing manner and helps the body heal itself in whatever way is necessary.

As a general rule, the more in touch you are with your body, the greater the effect you will notice. You may feel warmth, notice an increased brightness of vision, a general relaxing, an opening of your energy. A general feeling of well-being is often reported. The number of colds you get may well be reduced. Older people frequently report an increase in mobility and a decrease in niggling joint pains.

If your body is already very open and relaxed and your energy strong, you may not notice these effects. You may simply register Kombucha as the tasty, refreshing, slightly fizzy, benign drink it is, which helps you to stay well!

PROBLEMS ASSOCIATED WITH KOMBUCHA FERMENTATION

With any living fungus, accidents can occur which may prove harmful or even lethal to the organism. If the temperatures are not regulated or if the fungus has been stored for a long period of time, it can acquire a glutinous coat. If this happens, it should be cleaned, using lemon juice or wine vinegar. It can then be used again. It is a little harder if the fungus has started to grow mouldy. Too low temperatures or an unclean environment can be the cause of this. In this case, dispose of the beverage and wash the fungus as described above. The usual 10% should be taken from another brew to start a new batch. If there are no other batches, put the fungus into the prepared tea with the required sugar content and add two tablespoons of vinegar (better still, Kombucha vinegar if

The Kombucha beverage is a living thing, hence its healthy and energising effect. The main problem with our diet today lies in the many preservatives and chemicals it contains.

available). The beverage should have a sour smell to it after a few days. This is an indication that the fungus is working. It shouldn't have a mouldy smell. In areas where the vinegar fly (*Drosophilia fenestarum*) is active, it is very important to cover the beverage with a muslin cloth fastened by a rubber band to prevent the fly entering the container and laying eggs. (Meixner).

Don't wash the fungus if there is no obvious reason to do so, unless long storage or mould indicates it to be necessary. The fungus is always slimy! In one case I came across a fungus which did not work correctly. The person who owned it had apparently done everything right. I went to the supplier in the next town and found that the liquid used had been stored in a 30 gallon (US) or 25 litre container with a narrow neck. It had been filled right to the top with the fabric cover touching the fungus. The fungus simply did not have enough air to work properly. Even by doubling the fermentation time, the brew was still too sweet and the drink not healthy. I traced the culture further back to the previous supplier

where it was not doing well either. Brewing had been done here for the previous five months with only 20 grams of sugar (less than an ounce) being used per litre (1 3/4 pints). All these cultures were brought back to normal performance. With two of them, I added commercial beverage and with another I used a double-strength black tea with double sugar and allowed it to ferment until very sour. With this brew, normal fermentation with good results continued. See also chapter on drying the Kombucha fungus. NB: A dead or ailing culture cannot perform properly and will not produce a healthy drink.

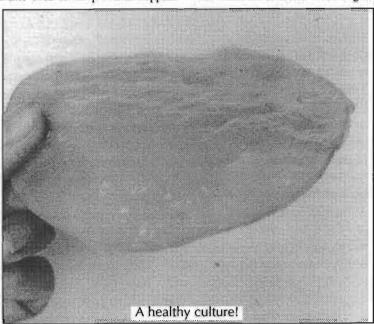
possible that, when first tasting Kombucha, it may be unappealing and sour to some palates. Kombucha should taste pleasant (apart from some herbal tea combinations) and one should not forget that unlimited different flavours can be achieved by experimenting. Depending upon the length of the fermentation, the liquid will be either clear or misty. After a short period of time, the yeast will settle on the bottom. This yeast sediment can either be consumed, as with 'wheat beers', or filtered off with a cloth. Ten per cent of the liquid should be used to start the next batch. The rest may be filled into bottles and sealed with corks—taking care to leave a little gap at the top to prevent the bottles from exploding.

HOW MUCH CAN ONE DRINK?

One circular letter I found being distributed with Kombucha mentioned some possible negative side-effects:

"Rapid detoxification can cause discomfort in some people if too much tea is drunk when beginning treatment. Work slowly up

> week by week from six tablespoons daily in divided doses. At two tablespoons, taken three times daily, discomfort can usually be avoided. Some possible side-effects can include headaches, stomach aches, nausea, fatigue, dizziness, mild diarrhoea, constipation, pimples, rashes and wind. However, these are temporary effects lasting from a day to a week or so in basically healthy people. Drink extra water to counter them. People with a disease condition may experience a healing crisis if they drink too much too soon. Kombucha effects appear to begin in the weakest part of the body, then the second weakest and so on."



NICOTINE: A DEADLY POISON FOR THE FUNGUS

Tobacco smoke will kill the fungus. People have often rung me and told me that their fungus was not working any more. In 50% of these cases I found that someone was smoking in the room where the fungus was fermenting. The fungus cannot tolerate tobacco smoke. With occasional chimney smoke the fungus may survive. The beverage will, however, adopt a smoky taste which will still be noticeable in future batches.

STORING KOMBUCHA AFTER FERMENTATION

The Kombucha beverage is a living thing, hence its healthy and energising effect. The main problem with our diet today lies in the many preservatives and chemicals it contains. Kombucha fermentation occurs more quickly at room temperature and slows down considerably in the refrigerator. If left to ferment too long, the end result is a sour beverage that is still healthy but not to everyone's taste. During slimming diets, this sour beverage is used frequently. Caution should be taken with bottles stored for a long period, however, as they may explode due to gas build-up.

Commercial Kombucha beverage, available in some health shops, may have a very sour taste, which would be a good indication that it had not been preserved or tampered with. The nutritious effect of this beverage is just as good as 'home brew'. It is

Since there are thousands of ways to brew Kombucha, there is no definite way to find out which part of the brew might have caused the negative side-effects mentioned in the circular.

MIXING TEAS

The most popular Kombucha drinks are the ones in which different tea mixtures are used, according to taste, in the brewing during fermentation (see "Herbal tea refinement through Kombucha"). Some people add fruits to the brew two days before the end of fermentation. This not only improves the flavour, it also adds vitamins and all the other benefits of the particular fruit or vegetable in the drink. When a seasonal fruit is used, it should be thoroughly cleaned and blended in the kitchen mixer. A strong fermentation is triggered shortly after the fruits have been added. The result is delicious.

Copies of Harald Tietze's book, Kombucha—The Miracle Fungus, are available to NEXUS readers in Australia at AUD\$12.00 each (inc. p&h), and in New Zealand at AUD\$13.00 (airmail).

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TESLA ELECTRICITY GENERATION EXPERIMENT—PART 2

by Anthony Hansen

In the last issue of NEXUS (vol.2#25), I mentioned briefly Nikola Tesla's work at Colorado Springs which, even today, is not really appreciated nor, in most cases, even known.

The big question is: What was Tesla up to at Colorado Springs? I believe if you look at Tesla's work it is obvious that he placed a high priority on energy, especially clean power. This is evidenced by his efforts which ultimately resulted in one of his finest energy supply systems: the world's first power station using clean, reusable power, namely, Niagara Falls, which is a permanent monument to Tesla.

Having made this a reality, he realised there was possibly one inherent flaw in this otherwise near-perfect power supply system. This is, as Tesla pointed out, the use of power lines to distribute the power to areas where it is required. Obviously, power lines do this quite well—except for the following objections:

- 1. The cost to supply and install power transmission lines is expensive, and a lot of maintenance is required.
- 2. There are very real dangers to do with radiation from power transmission lines—which have been well-documented, with new horror stories emerging practically every month—especially as the operating frequency is 50/60 cycles, which Tesla never wanted used.
- 3. They are unsightly systems to view and could be classed as visual pollution.
- 4. In spite of Tesla's high-voltage transmission methods—which are very good compared to earlier DC transmission systems—they still require quite a lot of power to drive the system. By this I mean there is still a lot of resistance in the power transmission system. The end result is a waste of power.

Tesla was most aware of this, and after a lot of thought and research came to one of his most profound discoveries: that the Earth is a far better conductor of electricity than any transmission line.

The above statement should be thought

about. What it means is the following:

- 1. No need for power transmission lines.
- 2. Telephone communication can be done using the Earth as a conductor.
- 3. Radio, television, fax, etc. can be sent through the Earth.

If one reflects on the previous examples it can be seen that, once implemented, it means a giant step forward for communication and power use.

The other matter to consider is: Why is the system not in use? All I can say is, you, as the reader, must reach your own conclusion. Some of you may say, "Perhaps it does not work." If so, I disagree, for the following reason:

The Earth has been used for a long time as a return conductor in systems such as telegraph circuits. It is also interesting to note that the return circuit has much less resistance than the telegraph supply line.

It is also more or less well known that, given half a chance, electricity will always flow back to Earth, like water flowing downhill. The water, if it can, would eventually flow back to the world's oceans. As

surely as the world's oceans are the reservoir of water, I believe the Earth is the original reservoir of electricity.

Let's consider this another way. When lightning strikes the Earth, what happens? One of the basic laws of physics is that energy is neither created nor destroyed. Well, if this is the case, the Earth presumably stores this energy.

Another way to consider this is the following. We live on a planet that is approximately 9,000 miles in diameter. We are moving at 1,200 miles per hour, or 1,100 feet per sec-

ond, on the equator. Could the Earth be a giant rotary generator with a north and south pole and apparently full of electricity? In other words, every rotary generator is a miniature replica of the Earth.

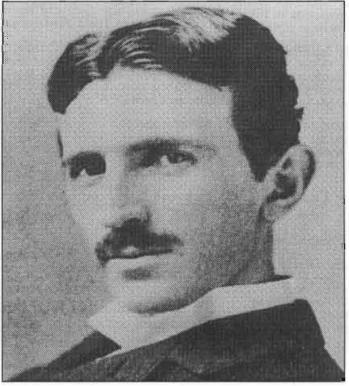
A final comment on this. There have been many accounts of lightning leaping from the ground up to the sky. This clearly shows that the Earth is charged to a very high potential or voltage.

So, we have been standing on, living on, travelling about on the ultimate communication and power system without ever, in most cases, being aware of this.

Another consideration of the greatest importance: Can we continue to burn fossil fuels and destroy this most wonderful planet, our only home? Everyone is aware of how serious these realities are.

Tesla was very concerned, and did his best to correct these problems.

I consider all these problems are a test for mankind—and until we solve these problems on Earth, we will never conquer distant worlds in the intergalactic medium which, I believe, is mankind's true destiny.



NEWSCIENCENEWSCIENCE

NICOLA TESLA'S ELECTRIC FLYING PLATFORM—The World's First Flying Machine, circa 1900 by Anthony Hansen

With discoveries there is always a first, and few, if any, inventors ever beat Nikola Tesla, especially with the power systems he developed. The Colorado oscillator could easily produce 500,000 horsepower—the perfect power supply for driving the electric flying machines he was developing.

It was hardly practical to fly these devices around New York—not if you wanted to keep them secret. Colorado was the perfect place to fly around unnoticed—or so Tesla assumed.

Deep in thought as usual, he felt safe

testing his equipment, especially at night. Why not? He had been doing this for some time. Why should this evening be any different? But so it was to be, as he was soon to find out.

While most people would be indoors at home or perhaps enjoying the saloons in Colorado Springs, it was unusual for anyone to be out at night on foot in the middle of some rural area, but this was the case this night.

Horses were valuable creatures. If a rancher lost a horse, it had to be found.

This particular rancher had seen his horse earlier and it seemed alright, although a little jumpy.

The man had noticed some strange things when he was pumping water from an old

hand-pump. He had received a tingling sensation from pump's the metal lever. His wife had refused to use the pump for some time, and now he had felt the same sensation she'd reported.

Some time later he put some horsefeed into a bucket and walked across to feed the horse. Usually the sight of the man with the bucket was enough for the horse to come up for his food-but not tonight. The ranger surprised. was Why did the horse seem so jumpy? "I must be getting old," thought the rancher. "I could swear I saw sparks coming from the horse's feet when I lifted up a hoof."

It was not imagination at all. The horse had metal horseshoes. Every time he lifted a hoof from the ground, sparks two to three inches long arced back to

Earth. It was too much for the now-terrified creature. It galloped off in a frenzy, sparks jumping from the iron horseshoes as it sped away into the night. This was indeed a strange situation, thought the rancher.

Meanwhile, some distance away, Tesla was adjusting his huge electrical oscillator, unaware of its effects on the horse. He had lots of experience with these devices. Some years earlier he had reached the limit for these high-voltage machines in a city; hence the remote area of Colorado Springs was ideal for what he had in mind.

The oscillator had been going for some time now. Tesla had set the device to increase slowly in power. When it got to a certain intensity, it would be time for another test. This was a test that Tesla looked forward to.

Tesla really enjoyed these experiments—and why not? To fly around at night, gliding 10 feet above the ground at virtually any speed he felt like, was ecstasy. The cool Colorado air in his face reminded him of his native homeland. In the distance he could see the giant tower-like structure, 167 feet high, with the metal ball on top. The entire vertical iron column was now glowing with a purple corona. It was a marvellous sight, Tesla thought.

Tesla stepped onto a strange machine. It was approximately six feet wide by 12 feet in length. It was a wooden box-like structure about two feet in height. Inside the box were rows of capacitors and coils. Underneath were sheets of copper on top. At the back was a large coil, about five feet diameter and about eight feet high. On top of this was a metal rod, about three inches diameter and six feet high. At the top was a metal ball, about 24 inches diameter. At the front was a small upright section.

Tesla stood behind this and moved a lever. There was a strange humming noise. Nothing seemed to happen for a few seconds. Then, with a crackling noise, the platform lifted from the ground like Aladdin's magic carpet. Streamers arced back to Earth furiously—but then suddenly stopped when the platform reached a certain distance from Earth, usually about 12 feet.

It was now time for a test run. In the distance, Tesla could see Pikes Peak and the railway wagons moving near the base of the mountain. It might be wise, Tesla thought, to keep away from this area. Best to go the opposite direction—less chance of being seen, and less populated.



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Things were going well. The platform was gradually rising higher—a sure sign that the oscillator was increasing in power. Tesla tried to avoid wire fences as they had the annoying habit of causing the underneath of the platform to send streamers back to Earth—although they were convenient for testing the amount of power stored in the capacitor banks. They could also cause grass fires—something he could do without. Country folk were terrified of grass fires, and with good reason.

Tesla was now about three miles from the experimental station when he decided to land and do some adjustments. He had no sooner landed when, out of nowhere, the rancher came, looking for his horse. He had been searching for some time to no avail, and instead had found something too unspeakable to comprehend. But there was no escaping this situation. It was enough to make a man religious, especially as he had heard a travelling preacher warning of the dangers of electricity: "It's the work of the devil, it's an agent of the devil." To show any interest in it was to invite a sure oneway trip to hell. No such thoughts would have been in Tesla's mind-only thoughts of the experiment in hand. And now the possibility of premature exposure-a serious consideration, but what to do?

It was all too much for the rancher. These were simple country people. To see a strange thing like this glowing in the moonlight, Tesla dressed in black, his sixfoot height made even taller by his four-inch insulated rubber shoes, was too much for the rancher. This had to be the work of the devil. Only one thing to do: run like hell and hope you lived to tell.

Tesla probably had similar thoughts of making a hasty retreat, and he had the ideal means of escaping. Well, it just shows you, people turn up in the strangest places. The rancher had unwittingly seen one of the most marvellous of scientific tests ever—and the least documented.

This strange encounter was told to me by the son of the rancher—an old man in his eighties whom I met around 12 years ago when I was in the Henry Ford Museum in Detroit, standing out the front of the Edison Museum workshop—and was, I must say, a powerful incentive to find out more about Tesla.

It gives me great pleasure to share this for the first time with NEXUS readers.

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SUPER SPACE MAGNETIC POWER SOURCE DISCOVERY

by Robert Adams

[The news of this discovery was first released at the NEXUS Conference in Sydney on Sunday 26th March and was the highlight of the Adams presentation to the Conference.

Scientist Robert Adams of Whakatane, New Zealand, has had a long-standing research relationship with his valued friend and colleague, Captain Bruce Cathie (retired), internationally recognised researcher in the fields of gravitational and electromagnetic energies.]

ruce and I came to the conclusion over 10 years ago that if we combined the Cathie harmonic unified field theory with the Adams magnetic technology, we would achieve the ultimate in electric motor and generator design, resulting in a machine of a very high order of efficiency.

During these 10 years of intensive research, Bruce's equations have been involved in our collective research.

In the latter period of 1994 our prediction became a reality, but with an enor-

mous bonus that was to follow. A short time after this success, I decided to conduct certain experimental work on a hunch I had, but its results were entirely opposite to what I had expected.

I had instead made an incredible discovery of a method to successfully engineer magnetic materials into increasing their energy potential to four times greater. This technology applies to magnetic materials of any composition.

As no outside electromagnetic force whatsoever is applied to cause the resulting massive increase of energy, it is then obvious that this massive increase in energy is gated from space/gravity.

Upon the engineering of the magnet taking place, the device is curving space, creating enormous powered vortexes, in turn reaching zero point/negative time within this vortex. In the case of a square magnet, four very powerful vortexes emerge. Even in the case of a small magnet, only three-quarters of an inch square, the energy is such that it is very difficult to attempt to hold a thin screwdriver down the vortex centres.

To quote from the early 1994 manuscript of Bruce Cathie's latest book, *The Harmonic Conquest of Space* (1995, page 138, sentences 1 and 2):

"The work that we are both involved in now is to ascertain to what degree we can combine the harmonic unified theories discovered in my research with the construction of the advanced Adams pulsed machines.

"We believe that the ultimate in motor generator design could emerge from this collaboration. Efficiencies have already been increased but the work is ongoing and there always seem to be more surprises around the corner."



NEWSCIENCENEWSCIENCE

THE ADAMS SUPER-POWER MULTI-POLAR MAGNET

have for many years theorised the existence of four poles interacting in any magnet. There is little doubt that two poles dominate from what is observed, and taught, in classical texts.

However, since my discovery of engineering magnets into forming four poles—and, in so doing, quadrupling the energy—surely some light has been shed on the theory of the existence of four poles. Bruce Cathie and I will investigate this further when time permits.

A rectangular or cube magnet, when engineered into the Adams technology, becomes a unit consisting of four twin poles, each face containing a north and a south pole, separated by a zero vortex in the centre of each of the four twin poles, and all displaying similar energies.

Ironically, but not unexpectedly, this super twin-pole magnet is a very valuable adjunct to further advancement of the Adams Motor technology. The energy found on the edges of each of the four faces is very high—25 per cent of the total energy of the full face.

The present lab magnets are approximately three-quarters-of-an-inch cube. The edge of any face will hold a five-kilogram steel or iron block in mid-air. When the full face of the magnet is attached to metal, a force of beyond 20 kg is required to remove it. In my presentation to the NEXUS Conference, I advised tests would be carried out this month to determine the strain required to remove the magnet.

The dice-sized magnet was attached to a steel plate on a ceiling rafter and, with the aid of a chain, a 15-kilogram block was first attached to it; then a 4.7-kg block added on with a nylon rope; then another 200-gram block was attached; then, a fourth 200-gram block. The magnet still hanging fast, a 100-gram block was added; then...wait for it...CRASH to the floor. The magnet was still attached to its anchor on the roof-rafter!

A magnet, approximately three-quartersof-an-inch cube, weighing only 60 grams, capable of holding a weight of beyond 20 kilograms in mid-air, 333.333 times its own weight? Will this at last have something of an effect on the closed ignorant minds of conventional science?

The way now must surely be clear that space/gravity energy via electromagnetic forces of permanent magnets is not impossible nor difficult to harness. The space/gravity energies are clean, non-exhaustible and free. The Adams technology has proved this and leaves no grounds for dispute.

Einstein's sacrosanct theories of relativity, and the laws of thermodynamics, are the most remarkable and inexplicable aberrations ever recorded in scientific history. These draconian false teachings have been instrumental in impeding the process of science towards free, clean energy.

CLASSICAL THEORY AND ADAMS TECHNOLOGY

The classical theory of magnetism from the textbooks attributes the phenomenon to the motion of electrons within the atoms of molecules. There is evidence that the orbital electrons in an atom not only revolve about the nucleus of the atom, but also each individual electron spins about an axis through its centre. It is believed that in highly magnetic materials, each atom has many more electrons spinning in one direction than in another.

In the submicroscopic region, i.e., the "domain", many of these atoms with electron spin in one direction create a magnetic field which effectively supplements the field engendered by the revolving electrons. Each domain thus becomes a tiny magnet. When the domains are in random

state, the substance as a whole is not a magnet. The application of external magnetic field will reorient the domains and produce a magnet in the way described above.

When the application of an external magnetic force has been applied and all the domains have been aligned. the condition of MAGNETIC SAT-URATION been reached, and any further increase in strength of the external force field will not increase the magnetisation of the iron any further. With the advent of the Adams Permanent Magnet Technology, is it not further evidence that conventional text teachings have reached the stage when they should be rewritten?

From the observations of certain lab experiments with ball-bearings, it is the opinion of the discoverer that the electrons circulate in conjugate pairs and have a spin opposite to that of rotation, and that the spin is four times greater than that of the orbital rotation. I note also that conventional texts prefer not to state direction of spin, nor velocity relative to orbital motion.

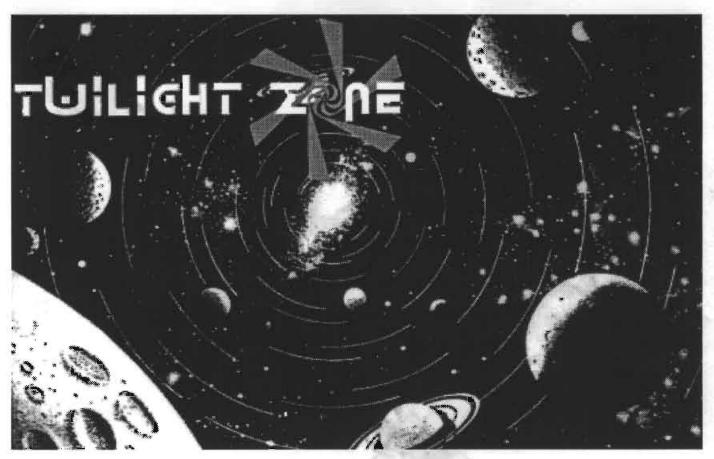
I do not therefore subscribe to the statement that "in highly magnetic materials, each atom has many more electrons spinning in one direction than in another". I feel such a condition cannot pertain in light of my discoveries.

Also to be addressed is the matter of the massive energy increase resulting from the Adams applied technology. Are man-made scientific laws once again violated? If the magnetic material is saturated when subjected to an external energy source, the Adams technology must then be gating space/gravity energy.

There is overwhelming evidence that space/gravity energy can be concentrated, focused and/or magnified by permanent magnets.

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VISIONS AND VOICES AT THE GREAT PYRAMID by Gordon-Michael Scallion

(This is the fourth instalment of the Ancient Civilisations series. In this month's feature, GMS brings forth information on the Great Pyramid of Giza that he received while in Egypt in January this year. —ECR #44, May 1995)

Our visit to Giza and the Great Pyramid changed my life. I do not make this statement lightly, in view of all the incredible changes I've experienced since my health crisis in '79 and subsequent thrust into the world as a visionary.

What I present next is as a result of a week of daily experiences while at the Great Pyramid.

The visions I've received at Giza are quite different from the visions I've been receiving since '79. Typically, when I see a vision, it's like viewing a split screen, like watching two or three aspects of the same scene. Not so at Giza. My first vision occurred before I ever entered the Pyramid. I was sitting on our balcony at the Mena House which faced the Great Pyramid, some one thousand feet or so away, when I found myself seeing a vision of workers clearing the plateau in preparation for construction of the Great Pyramid.

What occurred next is hard for even me

to explain, yet alone comprehend. I found myself being drawn into the vision, so that instead of it being an optical experience where I was viewing an event, I had become part of the scene I was watching. I had travelled back to the time of construction. I was there!

I could see large birds in the air which reminded me of prehistoric birds. The terrain was much different—semi-tropical, lush vegetation, temperature in the 70s and water surrounding the entire plateau. The hotel where I was physically experiencing the vision, was under water.

In the air was a large cigar-shaped flying machine which resembled a hot air balloon. Cables hung down from the craft to anchorpoints below. Workers dressed in white kilts, with cloth hats extending down to shoulder length, were removing stones from cradles that were housed below the craft. The activity reminded me of today's helicopters that can transport heavy materials in cradles supported by cables. I could see other airships coming into the area, being guided by anchor cables from point to point. Each ship carried a series of carriages, one stone to each carriage, with markings on each stone in glyph form. Herein lies yet another possibility in the pyramid puzzle: air machines were used to transport the stones from the quarries to the site—not barges, rollers and ramps!

If my experience stopped at this point, I would still consider it the most amazing experience of my life. Here I was watching what was to become, thousands of years later, one of the seven wonders of the world. I could hear the voices of the workers, the screeches of the mammoth birds of the day, feel the heat of the day. In every way, I was there. My thoughts ran so fast I began to become aware of a throbbing in my head, something familiar to me when I push too hard to receive information. In the early days of my visions, events such as this put me into bed for days at a time with excruciating headaches and electrical sensations running from my solar plexus to my feet. Pictures were flowing like a river of consciousness. No sooner had I thought to myself, "When is this occurring?" than an inner voice responded with an answer.

The time frame is 12,553 years before present.

Startled, I realised this was not a foreign voice to me. It was clearly my own voice, however, the construction of sentences and word usage were not common to me. Not trying to ask a question, I thought, "What is this?"

I am you, more specifically, the monad of which you are a portion.

Rather than go through all the dialogue on the monad, I can summarise the information I received to a few words: the

THE TWILIGHT ZONE

mind—not the brain. I'll share more on this in the future.

My thoughts dashed to a list I had created back in New Hampshire prior to our trip. It contained questions on the Pyramid and Sphinx that I hoped to find clues as how to discover their secrets. Now, here I was, tapped into a superconscious database/library of sorts, where I might do a tad better than clues. Concerned time would run out and I would lose the connection, my thoughts raced but I was committed to staying in the time-stream and allowing whatever was to be presented to occur, regardless of my personal desires to know. I thought, "Was this like a church or temple, where people come to pray for enlightenment or experience initiation?" A response to my thought was instant.

You seek a name to call this structure, a name to describe its purpose, do you not?

Again, startled and somewhat fearful I would loose the contact by my personal impulses to know, I thought, trying not to be too excitable, "Yes, that is exactly it." Again, instantly the response came back.

The Great Pyramid is a time machine.

This response was not one of the possibilities I had considered! How could it be possible? Today, television and movies are just beginning to explore the possibilities of time travel.

Look what this current civilisation has achieved in the past century. Electricity, the automobile, atomic power, lasers, space travel, all within a short span of a hundred years. Now imagine where civilisation might be in the next hundred years.

That is where these people were over 12,500 years ago. Civilisation does not necessarily develop technologically with time. Rather, it rises and falls depending on the civilisation's desired lessons.

"Who built the Great Pyramid?"

Atlanteans, in conjunction with Egyptians and Dareans.

My next thought was, "How does this machine work?"

The machine's purpose, as constructed, was multiple in design. Bending time was its focus so as to provide a process for initiation. However, the manner in which this was accomplished provided other benefits for its people. These varied from increased crop yield, weather control, a form of electrical power, and a learning institute for the study of the heavens—astronomy, astrology and cosmic forces—mathematics, chemistry, inner world dimensions, and the seven levels of initiation. All were part of its design."

Astronomy and astrology," I thought.

Yes, as an observatory. The builders knew the cycles of the stars, their individual and collective emanations relative to the Earth and Sun, their effect on consciousness, and the fact that life was not limited to the Earth. To this end windows were known and so recorded in those chambers, known and unknown, to indicate times when communication was possible with people from other worlds—both inner worlds and physical worlds. Knowing these things then, it became possible to construct such an instrument that could attune to those forces emanating from stars

and other dimensions, amplify and modify them so as to bend time. This then allowed those in resonance with the instrument to enter the time-stream where all innerworld communication occurs relative to this sphere.

"What did these people hope to attain through time-travelling?"

A way to communicate with the Lord and His angels.

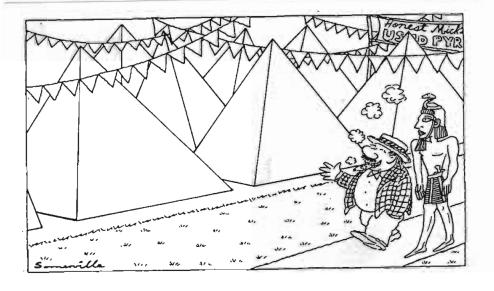
Stunned, I felt electrical sensations throughout my body, and instantly found myself back on the hotel patio, disappointed that my personal ego and joy caused me to break the contact. My head throbbing from the experience, I decided I would try again tomorrow, and fell asleep for the afternoon.

Realising the importance of timing and consistency regarding intuitive applications, I attempted to induce a vision the next day at the same time and location. Colourful visions emerged showing me the topography of the region, the position of the Nile at that time, and more construction visions. These were the more conventional visions that I usually receive—more of visions blending into other visions—each lasting only seconds. After fifteen minutes they stopped. Perhaps, I thought, yesterday was a once-in-a-lifetime experience.

Later that day we visited the Sphinx where we spent an hour or so. Upon leaving the Sphinx area, I walked to the top of the plateau where the Great Pyramid, two other larger pyramids—Menkaure and Khafra—and other structures are located. I stopped, about a thousand feet away on a turnoff in the road, and gazed at the three pyramids, enjoying their magnificence.

With a pop-like sound, I found I had once more time-travelled back to the construction stage of the Great Pyramid. Yesterday's experience had prepared me, or, rather, focused my thoughts in what I felt was important to observe. I never expected to repeat the interactive experience, but hoped I would be able to go back to the point I left the day before.

There were no pyramids present on the plateau—only the beginning of construction of what was surely to be the Great Pyramid. I observed the Sphinx, though much different in style and size, along with other buildings, rectangular in shape, and a few mound-like structures that seemed to be old. The birds (of my experience the day before) continued to fill the sky. I noticed several men with slings of some sort, containing a weight on the end so that



THE TWILIGHT ZONE

when they spun it in a circular fashion, a high-pitched screech was emitted. This caused the larger prehistoric-looking birds to scatter. A few moments later, a large airship entered the plateau. I prayed I could keep centred and become just "an observer". With a deep breath, I felt an electrical sensation in my shoulders and neck and began my first question.

"What is the relationship between the Great Pyramid being both a time machine

and a place of initiation?"

Life is initiation. Each thought, each action, is a portion of initiation. Man once walked with the Lord. All thoughts were one. All actions one. Then with a single thought, an infinite number of thoughts, separate and collective, were formed. It was the creation of souls. A portion of these souls came to this sun system to experience individuality, though they remained connected to the Host. With time, magnetic forces and will, communication with the Host and other spiritual realms became so blocked as to cause a separation. To aid in re-establishing the connection, a process of initiation or training was established, utilising the Great Pyramid as a communications instrument. In this way, contact would be possible for those who, through their dedication, could communicate with their soul mates and the Lord.

So many questions were part of my consciousness. I grabbed the first one so as not to loose the connection again. "Why so large a structure?"

The size and mass chosen was required in order for the instrument to contain the gases within the structure as the machine operated. The shape chosen acted as an antenna, collecting those particles that precede light from the heavens that are forever being drawn to this sphere.

"Explain antenna?"

This specific pyramid shape, in conjunction with its latitudinal position, acted as a lens—not optical but in focus, drawing to the machine those rays necessary for communication.

"Explain gases within the structure?"

Stones in specific portions of the instrument were set in place with a sealer-adhesive that allowed for airtight chambers and passageways to exist. The gases were a mixture of gases brought up from deep within the Earth, combined with gases created by the alteration of those elements as created through the instrument. The principles used here are similar to the laser used today but developed differently because of conditions then present.

"Was this gas invisible?"

Green in colour when active, invisible otherwise.

"Is this gas present in the world today?"

At times in nature when those magnetic vortices that may be found in the world become active.

"Active?"

Transition points—polarity shifts in the solar cycle—June and December currently.

"And the purpose of the passageways?"

Multiple in purpose—as service tunnels, sighting tubes, and to channel large quanti-

ties of gas to the appropriate chamber.

"And the main entrance to the ascending

and descending passageways?"

The main entrance has not been found. It will be discovered deep below the basenearer the centre of the pyramid-with a passageway leading up to the apex as well as to the Sphinx and other structures. What is now thought to be the main entrance was at that time used as part of the machine. At that time, a hinged door was set in the opening which, in one mode of operation, acted as a safety valve for the release of gas. In another mode, the door was held open by a lever, allowing the sighting and tracking of specific stars. This so the Earth's exact position, or axis relative to specific spheres-currently Polaris-could be determined. When used

for such alignment, light from the star entered the doorway and fell upon the instruments located at a position along the descending pas-

sageway.

"If the entrance was below the base, how did one get to the Queen's and King's Chambers?"

Access to these chambers was not required as they were a portion of the instrument—harmonicallytuned rooms. Through a stone staircase, travel to the top, or capstone, was possible, as was travel to the lower control rooms many hundreds of feet below.

"So there was a capstone?"

Yes, made out of the metals of the day—hollow.

"Are there other chambers above the base besides the King's and Queen's Chambers and the Pit?"

Yes, seven in number, above the base as chambers.

"What is the purpose of the shafts found in the Queen's Chamber?" These are for monitoring and controlling the gases internal to the structure at that location.

"What is the purpose of the Grand Gallery?"

This is the tuning circuit of the instrument. Along its length tracks, were fittedabove, below, and on each side-into which a timing device was housed in a carriage. The carriage, then, contained the likeness of a creature-part bird, part animal—holding a large crystal in its talons. The tips of the creature's wings reached to the height of the Gallery and contacted the upper tracks. This was then powered through induction by magnetic forces that propelled the carriage up or down the Gallery. When tuned properly, a timespace shift occurred within the instrument and, depending on the chamber selected, the desired result would occur: a portal

To be continued...

(Reprinted with permission from The Earth Changes Report #44, © May 1995, published by Matrix Institute, Inc., PO Box 336, Chesterfield, NY 03443-0336, USA, phone +1 (603) 363 4916, toll-free 1-800-628 7493, fax (603) 363 4169. Subscriptions: 1 year, USD\$36 in USA; USD\$46 foreign; single issues USD\$5 in USA, USD\$6 foreign.)



THE TWILIGHT ZONE

ICELANDIC UFO SAGA WITH MISSING AMERICAN WARSHIP?

The following was forwarded to the NEXUS email address, and is a summary of events related to a UFO conference in February 1995 by well-known author, Anthony Dodd.

20 December 1992

Mr Dodd receives a telephone call from one of his Icelandic naval sources reporting that three UFOs had been tracked coming down and entering the sea off the east coast of Iceland, near Langeness.

21 December 1992

Icelandic fisherman report incidents of large, fast-moving underwater craft with flashing, coloured lights. These were accompanied by a glowing airborne object overhead.

Heading on a course toward Scotland, the vessels moved through the water, damaging the nets being trawled by fishermen.

Accustomed to seeing submarines in the area, fishermen say that these vessels were unlike any submarines they had ever seen. Icelandic authorities ordered escorts by National Icelandic Coast Guard.

23 December 1992

An Icelandic Coast Guard vessel and two gunboats are ordered to take position on the north-east coast of Iceland at Langeness where previously, three days earlier, three UFOs were originally tracked. This operation is done in secrecy, causing crews apprehension.

Also arriving was a major force of British and NATO warships, described as a "naval exercise".

British newspapers report that, during the "exercise", they tracked a very large underwater craft, thought to be one of a new gen-

eration of Russian super-submarines.

24 December 1992

Two crews of British nuclear submarines are recalled from their Christmas leave. Both HMS Endurance and HMS Warrior, of the hunter-killer-type class, are sent to link up with the surface fleet in Iceland. Icelandic Coast Guard vessels are ordered to take up position at Alice Ford on the east coast of Iceland.

Further information is disclosed from contacts that four more UFOs have been tracked descending and entering the sea in the same quadrant as the first three UFOs sighted on 21 December.

Sources confirm that the operation is linked to tracking alien underwater craft. Also disclosed is a massive rescue-search for a missing surface vessel, being conducted in great secrecy.

30 December 1992

Icelandic radio broadcasts that many UFO sightings over the mountains near the coast of Iceland are being reported.

12 January 1993

Terrible weather conditions hold up all Icelandic vessels at Langeness Fjord. Fjord residents are terrified, having reported seeing strange, small figures running around the area at night.

6 February 1993

Weather improves and all ships ordered back to sea. Icelandic vessels resume previous positions on observation duty through to 24th February.

25 February 1993

In early morning hours, all vessels cautioned to stay at least three nautical miles away from the American destroyer flotilla operating near the Arctic Circle.

While waiting outside the three-mile zone, ship radar picks up 16 airborne contacts over the American fleet. Sixteen balls of yellow light are reported seen descending and hovering over the warships.

15 April 1993

All vessels in area of the Arctic Circle are looking for—in a secret operation—a missing American ship. Only two destroyers are now in that area, both having had their visible markings removed; crew can be seen wearing full battle-dress.

Civilian vessels, including gunboats and coast-guard vessels, are ordered to stay away from the prohibited zone.

16 April 1993

British media report that joint American and Russian exercises are about to take place.

Press report that, for the first time since World War II, joint exercises between elite American and Russian troops are about to happen on Russian soil. The operations are to be in Siberia, and the arrival of American troops is to be Tiksi.

On the map, Tiksi appears to be the Russian seaport nearest the area where all this naval activity is taking place.

21 April 1993

Crew of an Icelandic Airlines flight travelling from London report they are aware of two UFOs as they pass over the north coast of Scotland.

Two large balls of brightly glowing light took up positions either side of their aircraft toward the tail end, held position all the way to Iceland, and flew off as the aircraft landed at Keflavik airport.

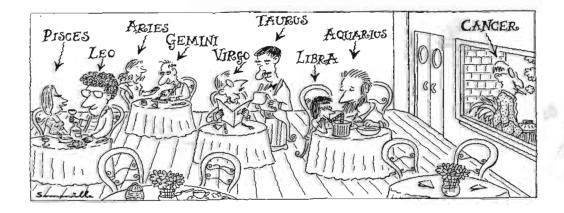
15 May 1993

Information surfaces regarding Icelandic gunboats searching for two Icelandic fishing boats. The crews are apprehensive and disturbed by the appearance of white tubular fluorescent-type lights which appear in the night sky hovering over their vessels. When this happens, ship radios fail to func-

tion, and then resume when they move away. The search for the missing vessels is called off after many days at sea.

The authorities are angry that this information has been leaked out. All ships' crews had been warned of the severe consequences of divulging any information about events of the previous few weeks.

(Source: Written by L.J.Smith @derby.ac.uk in peg:alt.alien.visi, 30 March 1995)





PRODUCTS

THE BREATHWORK EXPLORERTM by PhotoSonix

Price: AUD\$645.00 + delivery; STG£349 in Europe, STG£297 outside Europe (delivery STG£3.50 UK, STG£20 elsewhere; 7 days) Available: Australia—Vibrance, PO Box 304, Broadbeach Qld 4218, ph (075) 92 4104, fax (075) 70 2688; UK—LifeTools, Sunrise House, Hulley Rd, Macclesfield, SK10 2LP, ph +44 (01625) 50 2602, fax +44 (01625) 61 0238.

What an amazing device! Brain-mind machines have sure come a long way. *The Breathwork Explorer* appears to be a virtual "Rolls-Royce" in its field.

You wear a lightweight headset consisting of goggles, headphones, and a special sensor that is positioned under your nose. A compact computerised control unit monitors each in-breath and out-breath, teaches you ancient breathing techniques and reports on your progress over time.

This machine can be used in any of three modes: (1) Breath Monitoring—pleasant ocean sounds and lights rise and fall on each breath; a tape switches on automatically once you're in a relaxed state; a relaxation score is displayed after each session; (2) Guided Breathing—calibrates your breathing patterns via any of ten breath-pacing programs available; and (3) Light and Sound Programs.

The Breathwork Explorer offers pulsed tones or psycho-acoustic 'binaural beats' for any frequency you like. If you can afford it, and if you need some heavy relaxation or learning input, this is the machine for you. Of course, if you just want to drift off...

BOOKS

UFO QUEST:

In Search of the Mystery Machines by Alan Watts

Published by Blandford (1994), London, UK ISBN 0-7137-2449-8 (192pp p/b) Price: AUD\$19.95; STG£7.99; USD\$n/a Available: Australia—Capricorn Link (Australia) Pty Ltd, ph (02) 899 8322, fax (02) 899 8221; Sydney Esoteric Bookshop, 408 Elizabeth St, Surry Hills, NSW 2010, ph (02) 212 2225, fax (02) 212 2448; UK—Cassell PLC, Villiers House, 41-47 Strand, London WC2N 5JE; USA—Sterling Publishing Co. Inc., 387 Park Ave South, New York, NY 10016-8810, ph (212) 532 7160.

Long-time British UFO researcher Alan Watts provides a detailed and scientific analysis of a variety of UFO phenomena in this appropriately titled book, which includes first-hand accounts of significant events and sightings from the 1940s to the present

Watts argues that UFOs are real spacecraft, and that while Earth has been visited by extraterrestrials since prehistory, it is only quite recently, with the acquisition of advanced technology, that alien space races have stepped up their interest in us.

The story of how he and fellow researchers came up with a flying saucer propulsion theory in the 1950s by studying the type of craft involved in George Adamski's close encounters is a fascinating insight into those early fact-finding days.

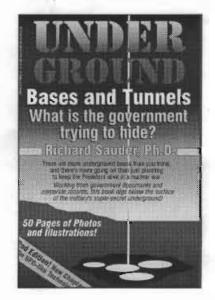
From flying saucers to crop circles, Alan Watts' perspective is one that shouldn't be missed by those keen to expand their knowledge in the ever-broadening field of ufology.

UNDERGROUND BASES & TUNNELS: What is the Government Trying to Hide? by Richard Sauder, Ph.D.

Published by Dracon Press (1995), Abingdon, Virginia, USA ISBN 0-9644979-0-5 (142pp p/b) Price: USD\$13.95 + p&h Available: USA—Adventures Unlimited, PO Box 74, Kempton, IL 60946, ph +1 (815) 253 6390, fax (815) 253 6300.

This investigation into US underground bases and tunnel systems is as thorough and methodical as possible considering the information is gleaned from the (albeit obscure) public record and via painstaking Freedom of Information searches.

There is certainly much circumstantial evidence supporting the notion that the US





BOOKS

(secret) government has gone 'over the top' with its construction of underground bases and tunnels.

Richard Sauder gives some space to discussion of rumours associated with underground facilities: 'black' experimental flight projects, radiation monitoring, alien abduction scenarios involving military cooperation, mind control, implantable telemetric devices, cattle mutilations and more—but he goes to pains to explain the problem of proof. Interestingly, he includes a press release from the Phillips Laboratory at Kirtland Air Force Base, New Mexico, on a portable medical laser capable of precision-cutting and closing wounds 'in the field'.

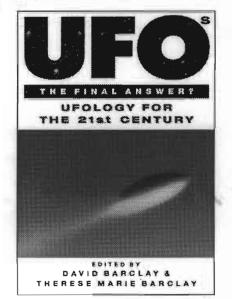
What does the US Government have to hide? This important book raises more questions than it answers, but at least now, by knowing what to ask, we may better assert our public right to know.

UFOs: THE FINAL ANSWER? Ufology for the 21st Century Edited by David Barclay & Therese Marie Barclay

Published by Blandford (1993/4), London, United Kingdom ISBN 0-7137-2362-9 (192pp p/b) Price: AUD\$16.95, STG£6.99; USD\$n/a Available: Australia—Quest Books, trade enquiries only (02) 264 7152; Sydney Esoteric Bookshop, ph (02) 212 2225,fax (02) 212 2448; UK—Cassell PLC, Villiers House, 41-47 Strand, London WC2N 5JE; USA—Sterling Publishing Co., Inc., 387 Park Avenue South, New York, NY 10016-8810.

As the editors have suggested, if UFOs did not exist, they would have to be invented. Does the human psyche have some deeprooted need for UFO-like phenomenal experience? (And is this need being taken advantage of by unscrupulous agencies?) This is the starting point for this collection of writings covering all sides of the UFO debate.

Don't expect photo-documentation in this compendium, but you can look forward to inspiring analysis from a collection of experienced UK-based ufologists. Some astounding historical examples of UFOs are highlighted, as are key findings in psycho-sociology, and real-life case studies of sightings and alien abductions. Questions of illusion vs reality are dealt with in the chapter cleverly titled "Science v. Saucery".



While UFOs: The Final Answer? does not pretend to come to a definitive conclusion, co-editor/contributor David Barclay believes "the solution to the UFO mystery would solve more than just the mystery itself." Indeed, he maintains we're on the verge of a cosmic paradigm shift brought about in part from our collective realisation that Earth and humankind are not the centre of the universe.

WATER MEDICINE

by Harald W. Tietze
Published by Harald W. Tietze (1995),
Bermagui South, NSW, Australia
ISBN 0-646-23563-X (98pp p/b)
Price: AUD\$9.80 inc. p&h; AUD\$3.00
airmail to NZ; AUD\$5.00 airmail elsewhere
Available: Australia—Harald W. Tietze,
PO Box 34, Bermagui South, NSW 2546;
ph +61 (064) 93 4552, fax +61 (064) 93
4900; Sydney Esoteric Bookshop, +61 (02)
212 2225, fax +61 (02) 212 2448.

This book is a fascinating compendium of water treatments—the oldest medicine in the world. In fact, I had never realised there were so many such detailed treatments in existence.

For example, did you know that in parts of Russia they use 'living' or 'dead' water as a treatment for ailments such as haemorrhoids, hair loss, dermatitis, cold sores, acne, and so on?

Also covered is Kombucha (see article this issue), mineral waters, spas and saunas, urine therapy (yes that's right—you drink your own urine, every morning!), filtered water, baths, douching—really, virtually everything you can think of.

Harald Tietze also explores the link between underground water and human health. Good stuff!



BOOKS

THE ORION MYSTERY: Unlocking the Secrets of the Pyramids by Robert Bauval and Adrian Gilbert Published by William Heinemann Ltd/Mandarin Paperbacks (1994), London,

ISBN 0-7493-1744-2 (350pp p/b)
Price: AUD\$14.00; STG£5.99; USD\$13.95
Available: Australia—Sydney Esoteric
Bookshop, 408 Elizabeth St, Surry Hills,
NSW 2010, ph +61 (02) 212 2225, fax (02)
212 2448; UK, USA— selected bookshops.

From the early 1980s, long-time Egyptology researchers Robert Bauval and Adrian Gilbert have been exploring evidence to link Egypt's Great Pyramid and other Giza plateau pyramids with stellar astronomy and, thus, stellar- rather than solar-linked gods and religious belief systems.

While it was first suggested in 1964 that the Great Pyramid's shafts aligned with the Orion star system (celestial home of the god Osiris) and the celestial pole, scientific measurement of the angles was only accomplished in 1993 with the help of Eng. Rudolf Gantenbrink's remote-controlled robot, UPUAUT 2, which explored the shaft leading from the Queen's Chamber—only to come to a halt at a tiny doorway some 65 metres from the end of the shaft. (See NEXUS vol.2#18).

As luck would have it, Bauval and Gilbert had been conducting a photographic survey only days before Gantenbrink's robot was despatched, so were able to have their theory and mathematics verified on the spot.

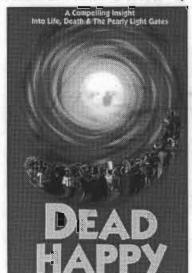
With the authors' combined expertise in engineering and esotericism, *The Orion*

Mystery is compelling reading for those with minds open enough to consider that the Great Pyramid is much older than traditional Egyptologists would have us believe, and that it was never intended, nor used, as a burial site for the Pharaoh Khufu (Cheops), but as a tool for communicating with the stars and the gods.

THE ULTIMATE EXPLANATION by Robert Norfolk

Published by Ranwaters Ltd (1994), Gt Yarmouth, Norfolk, UK ISBN 0-9523508-0-7 (184pp h/b) Price: STG£15.00 + p&h Available: UK—Ranwaters Ltd, 9 Owen Rd, Harfreys, Great Yarmouth, Norfolk NR31 0NA, ph/fax +44 (01493) 44 3484.

What a remarkably likeable book! I appreciate a book that outlines the overview up



front. So many books spend the whole volume detailing the substantiation of the overview, only to present it at the end.

This is the first of four books, all of which disclose a theory "designed to unify all of creation and all phenomena within it".

After twelve years' formulation, Robert Norfolk presents a new theory on life, the Universe, and the Mind of a Creator. It is qualitative and highly philosophical with very little maths. Among other things, it endorses the existence of an aether, dispenses with time as a dimension, describes a new fourth dimension, and disqualifies space as being empty.

DEAD HAPPY

by Lance Trendall

Published by Lance Trendall Publishing (1992, 1994 Rev. p/b ed.), Harpenden, UK ISBN 0-9520472-2-5 (193pp p/b) Price: AUD\$26.50 inc. p&h; STG£10.00 surface or STG£12.25 airmail; USD\$17.60 inc. p&h

Available: UK—Lance Trendall Publishing, PO Box 69, Harpenden, Herts AL5 2LY, ph +44 (01582) 46 1581, fax +44 (01582) 76 6488

This is a very approachable book on an alltoo-often taboo subject. Dead Happy suggests that death should be regarded more as a matter for celebration, like a birth into a new dimension, rather than as a time for fear, guilt and sadness. Moreover, this advice applies equally for the recently departed and the grieving as it does for everyone.

English author Lance Trendall is a qualified integral therapist, marriage counsellor, hypnotherapist and healer whose quest to understand fundamental questions about life, death and beyond began at eight years of age



BOOKS

with his father's death.

His book, the result of over 20 years' research and practice in psychic/spiritual healing realms, is the sort of reference Trendall wishes he'd had access to at the time, to bridge the gap between the traditional teachings of spiritualism and the modern evidence from the 'other side'.

How better that we all be prepared for our own and others' deaths by knowing what really happens when we die, why ghosts exist (and how to help them move on), what the 'pearly gates' really are, and even how to cope with the sheer fact of 'waking up dead'.

Lance Trendall has amassed some moving examples covering these and more aspects of death and dying—including dealing with death from suicide, drug/alcohol addiction, abortion. He provides practical guidelines for living better in this world and making a smooth transition to the next.

MASQUERADE OF ANGELS

by Karla Turner, Ph.D., with Ted Rice Published by Kelt Works (1994), Roland, Arkansas, USA ISBN 0-9640899-1-2 (257pp p/b) Price: USD\$16.95 Available: USA—Kelt Works, PO Box 32, Roland, Arkansas 72135.

A thought-provoking book dealing with encounters with aliens here on planet Earth. No, these aliens were not like those in our cartoons, but were very human in appearance.

A couple of times while reading these quite amazing experiences, I got the impression that the 'aliens' knew the writer. Could it be

true that many of we humans are actually 'aliens' who have decided to inhabit human bodies from birth onwards, and experience 'life' as a human on planet Earth?

So, if you were an alien, and one of your friends or relatives decided to try out a 'lifetime' on this planet, wouldn't you want to visit? And what would you say to him/her if you weren't recognised?

Back to the review. Admittedly, I didn't get to finish this book, but I can tell you this: if you're trying to piece together how aliens fit into the big picture, read this book!

HEART LIGHT: Rescue at Sea by Diviana

Published by Random House NZ Ltd (1995), Auckland, New Zealand ISBN 1-86941-256-7 (196pp p/b) Price: AUD\$14.95; NZD\$24.95 Available: Australia—Sydney Esoteric Bookshop, (02) 212 2225, fax (02) 212 2448, from July '95; New Zealand—Random House NZ Ltd, +64 (09) 444 7197, +64 (09) 444 7524; most bookshops.

The true story of *Heart Light* is immediately gripping and heart-rending, with undeniable physical and emotional impact (the spine tingles, goose bumps and watery eyes).

Diviana Wheeler tells of how she, her husband Daryl, their son Shanc and his wife Shali survived a raging four-day phenomenon of a storm in the South Pacific, 540 miles north-east of New Zealand.

Having embarked on their voyage in their 42-foot catamaran, the *Heart Light*, on 30th May 1994 with ideal sailing conditions forecast for the coming days, on 3rd June at 4.00 am the four seafarers suddenly found themselves in a force-twelve storm of supernatural proportions. It came from nowhere and

without warning, staying at "a mindless level of ferocity for over 36 hours".

Battling wind gusts over 90 knots, massive seas averaging 50 feet with several 100-foothigh monsters, Diviana's story is an enlightening tribute to the power of love and courage in overcoming overwhelming odds.

At least 30 boats and more than 100 lives were at risk in this vast storm vortex. Many survivors told of strange, terrifying phenomena experienced while the elements raged—foreign-sounding voices speaking in high-pitched tones all around them, holographic apparitions, meteor-like objects flashing past, and a mysterious green, white and orange brightly-shining object hovering above, illuminating the entire sky and tractor-beaming onto the catamaran.

US-born Diviana migrated to New Zealand in 1990, and for the last 14 years has been an





BOOKS

educator in areas of brain/mind function and higher consciousness. She writes of being forewarned of this event—"that a tear in the fabric of third-dimensional reality would create a war in the heavens, and hell on the high seas"—yet chose to go to sea anyway.

Diviana's extraordinary story is full of shocks and surprises, and the storm phenomenon begs further research from the perspective of interdimensional physics and Bruce Cathie's grid mathematics. Look out for the film documentary, *Rescue South Pacific*, due for international release this year.

HEALTH—THE ONLY IMMUNITY The Alternative to Vaccination by Ian Sinclair

Published by Ian Sinclair (1995), Ryde, NSW, Australia ISBN 0-646-22643-6 (44pp p/b) Price: AUD\$10.00 inc. p&h in Aust; overseas orders add AUD\$2.50 p&h; 40% discount on 5 or more copies Available: Australia—Ian Sinclair, 5 Ivy St, Ryde, NSW 2112, ph (015) 294 817, (065) 84 3961.

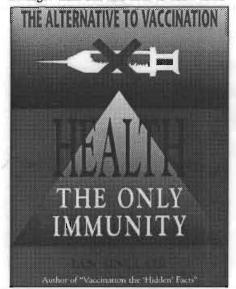
In this timely, fact-packed booklet, author Ian Sinclair presents a synthesis of fundamentals which the layman needs to know to achieve total health without drugs—and certainly without vaccines.

While on a speaking tour through the Australian eastern states during late-1993 to late-1994, Ian Sinclair came to realise that many members of even the vaccine-awareness groups commonly asked: "Well, if vaccines don't work, what's the alternative?" This uncertainty and confusion prompted

him to write this book of simple principles.

With ten years' personal practical experience backing up his naturopathic college training, Ian Sinclair demonstrates that there is only one type of immunity against disease—and that is health. He goes a step further by showing how and why disease cannot develop in a healthy body, and puts special emphasis on children's health.

To embrace these principles means there is no room nor need to resort to vaccines and drugs to prevent disease. Armed with these workable guidelines and Ian's answers to some commonly-asked questions on natural health and vaccination (as well as the motives behind it), one can proceed boldly and confidently, knowing that good health is the best defence—and possibly the best revenge! Read this on a need-to-know basis.



THE ATLANTIS RESEARCHES by Paul Dunbavin

Published by Third Millennium Publishing (1995), Long Eaton, Nottingham, UK ISBN 0-9525029-0-9 (297 pp s/b) Price: STG£17.50; USD\$n/a Available: UK—Scriptmate Editions, 20 Shepherds Hill, London, N6 5AH; USA—Adventures Unlimited, PO Box 74, Kempton, IL 60946, ph +1 (815) 253 6390, fax+1 (815) 253 6300.

This is a scholarly, comprehensive investigation into the myths and evidence surrounding the Atlantis mystery. It begins with the the great Greek philosopher Plato's own story of the lost continent's demise—a story handed down more from the Egyptian than Greek tradition and which few believed even in Plato's time.

Author Paul Dunbavin takes us on a search for the lost Atlantis where Plato left off. He includes other evidence from classical writers, and covers scientific evidence for recent comet impacts, dramatic polar shifts, as well as sea level and climate changes throughout Earth's recent history—particularly about 5,000 years ago.

Dunbavin also puts forward the circumstantial evidence for Atlantis and a Great Flood or Deluge, based on remnants of various ancient cultural traditions including the Sumerian, Egyptian, Chinese, Mayan and Celtic

These remnants may consist of legends or artefacts such as ancient calendars or standing stone arrangements.

The Atlantis Researches is a modern classic text on a subject which today, far from being a lost cause, is undergoing a rise in popular interest.

Plato would be pleased.



BOOKS

THERE IS ALWAYS AN ALTERNATIVE by Dr Peter Baratosy, MB, BS Published by Scheibner Publications (1995), Blackheath, NSW, Australia ISBN 0-646-222211-2 (110pp p/b) Price: AUD\$15.00 inc. p&h in Aust; AUD\$20.00 inc. overseas airmail

Price: AUD\$15.00 inc. p&h in Aust; AUD\$20.00 inc. overseas airmail Available: Australia—Scheibner Publications, 178 Govetts Leap Road, Blackheath, NSW 2785, ph +61 (047) 87 8203, fax (047) 87 8988.

What a great book! Dr Peter Baratosy is one of the growing number of former 'mainstream' doctors who have embraced nontoxic alternative treatments.

His exposure to Chinese medicine, while based in Malaysia with the RAAF, plus his observations as a GP that patients' conditions often improved when taken off medication, led him to expand his knowledge of health and disease.

Chapter subjects include Acupuncture, Homeopathy, Hypnotherapy, Megascorbic Therapy (massive vitamin C), Oxygen Therapy, Rife, Children, Menopause, and a special section on Vaccinations.

Dr Baratosy's advice is both practical and understandable. Recommended reading.

WHAT REALLY CAUSED THE DINOSAURS' DEMISE?

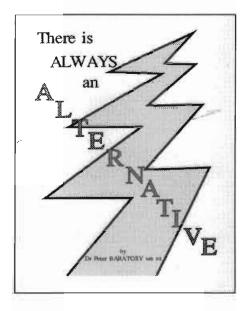
A Question of Increasing Gravity— The Ultimate Answer! by John West

Published by PBS Publications/Veritas Press (1995), Bundaberg, Qld, Australia ISBN 0-9588131-9-1 (151pp s/b) Price: AUD\$24.95 inc. p&h in Aust; AUD\$29.95 airmail NZ; AUD\$34.95 airmail elsewhere; STG£13.50 Available: Australia—Veritas Press, GPO Box 1653, Bundaberg, Qld 4670, fax +61 (071) 52 9256; UK—Whale Books, Kentchurch, Hereford HR2 0DB, ph (01981) 24 0125.

Whew! This is a far more diverse book than even the title suggests. The author's proposal basically embraces polar shifts, concomitantly coupled with increasing gravity accelerations and magnetic field changes.

This book abounds with interesting chunks of information. For example, not many people realise that 15 years after Einstein published his special theory of relativity, he retracted several of his views, and admitted that his thoughts on the aetherless space concept should be critically revised.

Chapter subjects include Gravity and Dinosaurs, Tachyon Energy, Evolution, Jupiter and Geller Effects, Cloudbusting (Rainmaking), Corruption in Politics and Science, NASA Cover-ups, UFOs, and Banking. Very interesting reading!



LOOM OF THE FUTURE: The Weather Engineering Work of Trevor James Constable An interview conducted by Thomas J.

Brown

Published by Borderland Sciences Research Foundation (1994), Garberville and Bayside, California, USA ISBN 0-945685-19-X (148pp s/b) Price: £STG17.95; USD\$18.95 + p&h Available: UK—Bellevue Books, Unit E4, Sunbury Int. Bus. Centre, Brooklands Way, Sunbury, Middlesex, ph (0932) 76 5119; USA—Adventures Unlimited, PO Box 74, Kempton, IL 60946, ph +1 (815) 253 6390, fax (815) 253 6300.

This is a brilliant introduction to Trevor James Constable's pioneering concepts and discoveries in etheric weather engineering. Following on from Dr Wilhelm Reich's orgone energy research, Constable has dedicated his life to unlocking universal secrets.

Constable realised that the etheric life force is an extremely powerful physical force that permeates everything, yet so subtle that we barely notice it. He recognised that the aether permeates and influences the atmosphere but also, because of its elasticity, it can be manipulated. Over the last 40 years, Constable has been demonstrating this phenomenon by applying simple geometric apparatus, according to specific orientations, for weather engineering purposes.

The photographic and radar map evidence



describing the effects of his biogeometric instruments is dramatic, proving that his technology certainly does work. As to why it's not been made accessible to the public, e.g., in the form of the helicopter-mounted drought-buster, Constable makes some incisive comments. He claims that the aether has become less elastic in the 1990s, hinting at other agencies having overstretched it—as part of a secret planetary agenda?

THE HISTORY OF THE KNIGHTS TEMPLARS, THE TEMPLE CHURCH AND THE TEMPLE

by Charles G. Addison

Published by Black Books (1995, first published 1842), United Kingdom ISBN n/a (395pp p/b)

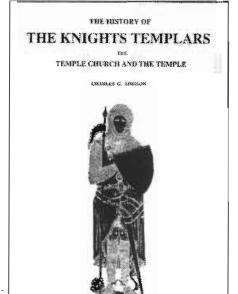
ISBN n/a (395pp p/b)
Price: STG£20.00 + p&h; USD\$40.00 + p&h (phone for quote)

Available: UK—Millennium Books, 9 Chesham Rd, Brighton, Sussex BN2 1NB, ph/fax +44 (01273) 67 1967; USA— Flatland Books, PO Box 2420, Fort Bragg, CA 95437, ph +1 (707) 964 8326.

The Knights Templar may have had an official existence of only a few hundred years, but their roots can be traced well back beyond their foundation during the Crusades (approx. 1118 AD), and their influence has continued through to modern times.

Far from being eradicated by Church edicts in France and Britain around 1311, the Temple Church lives on. Indeed, many prominent British politicians today could be regarded as card-carrying Templars.

Charles G. Addison's classic History of The



Knights Templars was first published in 1842, and this edition is the first in more than 100 years. Addison was a Templar and had access to the Templars' own records, so his account is a valuable document which sheds much light on the Templars and their true place in history—at least until the 19th century.

The effects of the Templars' architectural symbology, rituals and disciplinary codes of practice, their integrated Christian and Eastern esotericism, their establishment of the law societies, have filtered right through the centuries and are still being felt, recognised and reassessed today. Addison's History is a rare book that can be understood on several levels, for those with eyes to see...

VIDEOS

THE SOUND OF TRUTH with Hugo Symens

Price: AUD\$30.00 (+\$10.00 o/s airmail Available: Australia—Health Revolution, PO Box 3104, Victoria Point, Qld 4165, ph +61 (07) 397 1716.

This is a video recording of a seminar conducted by Hugo Symens in Brisbane, Australia, in November 1994.

The Sound of Truth details Hugo's technique for greatly improving the body's health. Particular attention is given to the elimination of harmful bacteria and toxins from the body. Hugo Symens is already well-known in Queensland for his successful use of Green Clay, a powerful detoxifying substance which can be applied externally and taken orally. The success stories we hear indicate that Hugo's methods work. This is a highly recommended video both for people who desire better health and for those who wish to maintain good health.

TRIBULATION—The Coming Earth Changes

with Gordon-Michael Scallion

Produced by Matrix Institute, Inc. (1993), Chesterfield, NH, USA

Price: USD\$29.50 + p&h (1hr NTSC VHS, not available in PAL VHS)
Available: USA—Matrix Institute, Inc.

(1993), PO Box 336, Chesterfield, NH 03443-0336; ph +1 (603) 363 4916, toll free 1-80-628 7493, fax +1 (603) 363 4169.

By now, most NEXUS readers have heard



VIDEOS

of Gordon-Michael Scallion. For those who came in late, Mr Scallion is famous for his highly accurate predictions of Earth changes over the last decade.

This video first comes across like a documentary, recounting the incidents when Scallion started receiving his 'pictures' of events to come, and his subsequent years of learning.

Be aware, though: the predictions detailed on *Tribulations* are largely events due to affect America. One can deduce, however, that if the events he predicts come to pass, half the world, including down-under, will be feeling the effects.

There is also a theme running through these predictions—a hint that if we 'get our act together' we can offset some of the impending damage.

All up, this is a top video about Gordon-Michael Scallion, his work and his results.

FLOWFORMS AND LIVING WATER with Dan Winter

Produced by Dan Winter & Friends/Crystal Hill Farm (1994), USA Price: AUD\$30.00 inc. p&h; airmail p&h add AUD\$5.00 to NZ; AUD\$17.00 to UK/Europe (PAL/VHS); USD\$17.00 + p&h (NTSC/VHS)

Available: Australia—Cliff Pound, PO Box 202, Bangalow, NSW 2479; USA—Crystal Hill Farm, 9411 Sandrock Rd, Eden, NY 14057, ph (716) 992 9307, fax (716) 992 3025.

Dan Winter videos are always pretty amazing. This one is for those wanting to know about the secrets of water.

It is an exploration of the way water naturally wants to flow.

The subtitle tells all: "The archetype of cascade translates the vorticity of disorder into order in water."

Did you know that the braided spin in the waters changes surface tension, seed germination, and the segregation of solids by mass?

Imagine water treatment facilities which utilise flowforms to aerate and molecularly spin up the water.

Dan's beautiful flowform imagery effectively shows us the principle of 'healing of the waters'.

Also featured on this video is a 'tour' of European and American examples of flowforms. Inspirational!

AUDIO

THE CELESTINE PROPHECY

by James Redfield

Produced by Corgi Audio for Time Warner AudioBooks (1994), New York, USA ISBN 0-552-14343-X (3hrs) Price: AUD\$19.95 (2-cassette set)

Available: Australia—Transworld
Publishers, 40 Yeo St, Neutral Bay NSW
2089, ph +61 (02) 908 4366, fax (02) 953
8563; UK—Transworld Publishers Ltd, 6163 Uxbridge Rd, London W5 5SA; USA—
Time Warner AudioBooks, New York.

I must be the last person in Australia (or perhaps the Western world) to hear/read this book! I have to confess to not 'reading' *The Celestine Prophecy* until this audiocassette set came along. Now I've heard it, I can understand why it's the top-selling book on the planet at present.

This is a 'must hear' audio-book: a spiritual lesson in unfolding your personal potential on the planet to break free from the third dimensional limits that bind...a dramatic tale of intrigue, military crackdowns, stomachtuming chases, and the extraordinary manuscript found in a Peruvian jungle temple that is changing all who read it....the concept of synchronicity handed out clearly for all to understand...the clarification of intuition and where it's taking us in the world today that's pushing us into a new future...

This audio-book is a great way to learn the nine insights. Don't be the last on your block to tune in!

FREEDOM CRIES

by Shawn Gallaway

Produced by Initiation Records (1995), Nashville, TN, USA Price: USD\$10.00 (cass.), USD\$16.00 (CD) + USD\$3.00 o/s p&h (55mins) Available: USA—Initiation Records, PO Box 15872, Nashville, TN 37215, ph +1 (615) 790 9260, fax (615) 790 9604; and selected music stores.

Freedom Cries is an album fired by the energies of the men's movement in the USA,

Shawn Gallaway has put together a musical journey of discoveries surrounding his time spent in exploring the role of men in modern Western society.

The lost father, the broken home, the difficulties men have with expressing love and emotion, the power of men working together with the goal of saving the Earth and its creatures, rather than destroying—it's all here on this album.

I found a few tracks a bit slow, but many rang with the raw energy of masculine power working cooperatively.

A worthwhile album.



AUDIO

IVORY WINGS

Composed, performed and produced by Zach Davids for Ivory Moon Recordings (1994), Wellesley, MA, USA

Price: USD\$16.00 (CD), USD\$10.00 (cass)

(55mins)

Available: **USA**—Distributed by Ivory Moon Recordings, 22 Rutgers Rd, Wellesley, MA 02181, ph +1 (617) 237 6686, fax (617) 235 6789; and selected

A pianist described as a young genius, Zach Davids was just 18 years old when he put these compositions to disc, and wrote most of the material before he turned 17.

Ivory Wings contains most of Davids' own pieces as well as several improvisations on classical themes. He pushes the energy of this recording with much personal power. The effect is extremely engaging, putting the music right up front on your system. The sound is very stimulating, yet very beautiful and inspiring.

Zach Davids obviously has a long career ahead of him. Highly recommended album.

TO CATCH A FLYING STAR

(UFO Experiences) Produced by Jamie Leonarder and Matthew Leonard (1995) for ABC Radio National

ISBN 0-642-17659-0 (1hr)

Price: AUD\$16.95 (cassette only) Available: Australia-Allen & Unwin, PO Box 8500, St Leonards NSW 2065, ph +61 (02) 901 4088, fax (02) 906 2218; and ABC

Here is a very thorough history of some of the major UFO cases in Australia's long history of UFO encounters. It carries original recordings of the voices of everyday people who have had one or more of these extraordinary experiences. Included in the stories is that of Kelly Cahill, part of whose experiences were published in NEXUS vol.2#24.

UFO researchers, pilots and scientists add to the convincing evidence of unusual craft that have appeared in our southern skies.

Valuable research material for the dedicated and also for those with just a general interest. Good to hear the ABC tackling stories like this seriously. Recommended.

WAKULPA

Composed by Luke O'Neill

Produced by On Music Productions (1994), for Peacock Buffalo Records, Sydney, NSW, Australia

Price: AUD\$28.95 (CD) (44mins) Available: Australia—On Music, PO Box 1691, Collingwood, Vic 3066, ph +61 (03) 853 9440; and selected music stores.

The story behind this piece goes back to the time Luke O'Neill spent in central Australia at Wakulpa, a small outstation near Yuendumu working with local musicians. He recorded, then paused, reworked and added until the Wakulpa album was born. He has the help of Glenn Mortimer on percussion and Amelia Barden on oboe.

Wakulpa won the ABC Radio National Fringe Award for best performance in 1994. It's a quiet, peaceful and driftingly stirring composition that has an entrancing and calming effect in any environment where it's played. Very highly recommended for an evening around the fire or to relax with amongst good friends.

Congratulations to Luke O'Neill for a top Australian composition.

THE LYREBIRDS OF TIDBINBILLA

Recorded by Ederic Slater Produced by Larrikin Entertainment (1994), Mascot, NSW, Australia Price: AUD\$27.95 + o/s p/h (CD) (47mins) Available: Australia—Distributed by Larrikin Records, PO Box 501, Mascot, NSW 2020, ph +61 (02) 700 9199, fax (02) 700 9155; and selected music stores.

If the sounds of Australian native birds fascinate you, this recording is a must. It was put together by ornithological recordist Ederic Slater who lives near Canberra.

The Superb Lyrebird (Menura novaehollandiae) has been known since early settlement in Australia as an amazing imitator of sound. Some 50 species of bird-calls are in its repertoire. Included amongst this collection is the sound of the lyrebird's own territorial call, often confused for the sound of chainsaws, musical instruments or axes on timber.

If you've not heard this bird in the wild, its range will amaze you.

TIBETAN MONASTERY

Produced by New World Productions (1994), Red Hill, Qld, Australia Price: AUD\$18.95 (cass.), AUD\$28.95 (CD) + o/s p&h (60mins) Available: Australia-Distributed by New World Productions, PO Box 244, Red Hill, Qld 4059, ph +61 (07) 367 0788, fax (07) 367 2441; and selected music stores.

This album is part of New World's "Relax with Nature" series featuring recordings of environmental sounds, landscapes, animals and places.

Tibetan Monastery is in fact recorded in a monastery, replete with the sounds of monks, gongs, horns and the Tibetan shakuhachi flute. Indeed, it is a recreation of a monastery's inner sanctum.

For capturing the essence of the sounds of devotion in the Tibetan tradition, this album is essential-and extremely conducive for establishing some peace in your life.

The Lies of Unleaded Petrol — Part 2

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frequently accompanied by lymphoma and chronic tonsil enlargements. For this reason, it is now believed in Germany that CFS has to be a "virus disease". As long as 10 years ago when CFS was first observed in resorts situated at Lake Tahoe, patients showed a dominant infection with herpes viruses or the presence of very high herpes immune titres (IGG herpes titres). Since that time, many publications have been written on the infection problems of CFS patients, which all come to one conclusion: in the case of CFS, all kinds of infections occur in an accumulated manner, in particular through herpes (potentially carcinogenic and causing leukaemia), with cytomegalic viruses (also carcinogenic with respect to the kidneys and other abdominal organs), all kinds of bacterial pathogenic organisms, which are, in part, highly toxic and may lead to life-threatening pneumonia, and, finally, mycosis is frequently detected in CFS patients.

The conclusion from all these observations: In the case of CFS, there is severe general lowered resistance, which is mainly found in the cellular areas, i.e. in the area of cell membranes. This infectious, unspecific mixed evidence is called "occupational" infection, the main cause of which is lowered resistance.

Based on the extremely good information provided by the Larry King program on CNN, it became evident that CFS is unequivocally connected to the spread of catalytic converters in automobiles.

Shortly after my return from the US in 1991, everything went like clockwork:

- 1. A leading American platinum metallurgist pointed out to me that a catalyst must produce phosgene whenever chlorides are present in gasoline. This is virtually always the case. Not until 1993 did a fuelproducer provide the information that a certain compound of chlorine was being used as an "additive" in gasoline. Phosgene (COC₁₄) is a war gas, used in World War I, with a toxic effect on the lungs.
- 2. Mr K., who has unfortunately died in the meantime, and who had constant access to all of the new technical developments by Volkswagen at Wolfsburg, came to meet me, showing all signs of outright panic: "Volkswagen gave me the order to cause Gotze plant at Burscheid to develop piston

packings which are so tight that you cannot think of anything tighter."

This has a chemical background: unleaded cat. gasoline contains high quantities of MTBE (methyl-tert-butyl ether), which is necessary as an anti-knock substance (replacing tetraethyl lead [TEL]). In the meantime, the MTBE content has been increased in order to facilitate a higher specific engine performance. For the same reason, by the way, the benzene share of 5% has remained unchanged and is 'criminally' high. (In the US, this share is 1%.)

Engine oil contains an additive, zinc dithiophosphate [ZDTP], which cannot be dispensed with as it guarantees the longevity of engine oil. "If MTBE and ZDTP interact under heat, obviously something catastrophic is going to happen," Mr K. said.

If MTBE and ZDTP interact, phosphoric ester and similar compounds may be created, which fit into the group of nerve gases (Tabun, Sarin, E-605, etc.). At the end of 1993, I turned to a highly qualified full professor of the Medical School at Hannover concerning this problem. He asserted that, besides phosphoric esters and phosphines, the MTBE-ZDTP reaction could generate

The Lies of Unleaded Petrol — Part 2

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enols which block vital enzymes more than hydrogen sulphide (H₂S) does, also coming out of the car cat. in huge quantities.

3. Shortly after Mr K.'s visit, Mr v.W. of Hannover, unfortunately also deceased in the meantime, turned to me: "My little son caught a large number of houseflies alive. We held one half of these flies in a net approximately 50 centimetres [approx. 20 inches] behind the exhaust of quite an old car. The flies were rather groggy, but they survived. The other half was held behind a cat. exhaust. All of them were dead after 110 seconds, it being noticeable that they died virtually all at once."

This was Mr v.W.'s description. The occurrence of death "all at once", i.e., without a broader statistical distribution over a certain period of time, is typical of the effects of phosphoric esters and/or enols—that is, of substances that can block the cellular respiratory chains.

4. Since 1986, an assembly foreman or engineer working for Mercedes-Benz in Sindelfingen has contacted me several times by telephone. He reported a sudden introduction of protective measures for the

cat. assembly, and other measures which were supposed to be kept secret according to Mercedes-Benz and which were related to the platinum problems.

In 1991, this gentlemen called me once more: "Doctor, please help us! The exhaust of the cat. gasoline cars (not the cat. diesel cars) releases toxic gas, and this to a very high degree. The problem is especially critical after the car has been driven for about 15,000 kilometres [approx. 9,400 miles], when the gaskets are no longer in peak condition."

About three days after this late evening call, I heard a report on my car radio, according to which Mercedes-Benz had given out a warning concerning the "toxic side-effects" of the catalytic converter technology which could become "important after the car had been driven for about 15,000 kilometres."

As far as I know, diesel fuel does not contain any MTBE, so that the production of nerve gas is not to be expected with a diesel car.

This was about the state of our knowledge concerning the problem associated with nerve gas—except for the enol aspect—until the end of 1992. I had a report on

this topic published in Townsend Letter for Doctors in July 1991. Due to the extreme explosiveness of this subject, TLfD published my information in the most expedient way. And, of course, all Raum & Zeit readers are aware of the problem. No action, however, has been taken by Topfer, the Minister for the Environment, who is responsible—as was the case after 1987 concerning the benzene problem.

In the meantime, the occurrence of CFS has increased in Germany, but life goes on in the same old way. I also believed that everything had been said concerning the subject of catalytic converters and nerve gas—until, in 1993, a cruel discovery was made...

(To be continued in the next issue of NEXUS...)

CORRESPONDENCE:

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(Reprinted from <u>Townsend Letter for</u> <u>Doctors</u>, December 1994)

A RECIPE FOR REVOLUTION —

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pant for purposes of raping and butchering US citizens à la Ruwanda [sic] while the latter are preoccupied with trying to comprehend their extreme throes of pain, radio frequency burns and rupturing internal organs. Satanic cult members will be aided in this process by escaped prison inmates and psychiatric patients who, on the day in question, will find that the doors in their detention facilities are no longer locked. Once this (relatively low-level) Chaos has commenced, all previously regulated communications frequencies will be overridden by a single transmission coming from an underground bunker; specifically, the voice of an 'extraterrestrial' announcing that this country has been invaded from outer space. TVs and radios which are not operating at the time will be activated by means of technologies recently adopted for 'national emergency' purposes.[20] Viewers of TVs will be addressed by a person garbed in special-effects extraterrestrial costuming and make-up. The average US citizen, being gullible in cases involving "War of the Worlds" scenarios and having no knowledge of the effects produced by

amplified directed-energy systems, will firmly believe that an extraterrestrial invasion is underway. UFO cultists, persuaded that their equivalent of God had arrived, will rush to their terminals and assigned directed-energy emitters (on which they have been systematically trained), to assist the 'invaders' in this takeover (while saving their own necks). Imported East Bloc mercenaries will also be set loose upon the terrorized public to wreak their own uniquely brutal brand of Havoc.

"14. Now comes your RMA. The DoD will intervene to put an end to the carnage merely hinted at under Step 12, above. It is here the Army will be brought into the process. Being of the opinion that upholding and defending the US Constitution is his or her first priority, the average US Army soldier will willingly and obediently obey any order to intervene, particularly if the order is given in the context of a posse comitatus. Simply put, the military will be induced to take over this government in unsuspecting fashion, for purposes of trying to restore order to circumstances which evolved over the past 30 years under their very noses. Uncorrupted law enforcement officers will take part in this activity just as enthusiastically as the military, in the belief that their services are needed to restore law and order. US citizens who are currently tagged as 'dissident' will be re-tagged 'terrorist' for removal to the concentration camps which are rumored [to] be under construction in this country, guarded by government-contracted security firms such as Wackenhutt [sic]. The average soldier, having no basis for disbelief, will readily participate in these roundups. Because the US military has demonstrated a remarkable inability to handle concentration camps on a long-term basis, particularly when disruptive elements are housed in the detainee population (ex: Guantanamo and Florida), executions of detainees will commence. From then on, ... it doesn't really matter, does it? The revolution is underway."21

ENDGAME

Outrageous, paranoid, totally far-fetched and unsubstantiated extremist conspiracy theory—or is it? After all, how many Rwandans were massacred today? How many more innocent civilians died in Chechnya? How many drive-by shootings took place on the streets? How many people died in the latest 'terrorist' bombing?

— A RECIPE FOR REVOLUTION –

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How many 'death metal' records permanently burned their nihilistic messages into teenage memories? How many children lost their innocence to hate and fear?

The final paragraph of "The Revolution in Military Affairs and Conflict Short of War" states:

"Distilled to their essence, revolutions are acts of supreme creativity. The US military is not inherently hostile to creativity, but is cautious. If the nation—our political and intellectual leaders and the publicdecide that improving American capabilities in conflicts short of war is necessary and desirable, the preeminent task for the military is to continue to build and enlarge a culture of creativity and strategic entrepreneurship among the officer corps. To some extent this has begun. The changes leading to AirLand Battle, victory in the Gulf War, and the current RMA were supremely creative. Still, these were only first steps. To make a revolution in conflict short of war will be more difficult. But to allow technology to develop without concomitant creativity would, in the end, endanger the Nation's security."22

Hopefully such calculated barbarism, such calculated evil, will never come to pass, but should you detect any warning signs suggesting that it is, now you may also know what others to expect.

And if 'forewarned is forearmed', then, clearly, contributing to chaos and social disintegration would only be to play precisely the role that you are being so deviously lured into playing, leading you—all of us—straight into their technological clutches. Don't fall into that trap.

Work together-don't tear each other

Footnotes:

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- 3. Ibid., pp. v-vi.
- 4. Ibid., p. vii.
- 5. Ibid., p. 7.
- 6. Ibid., p. 10.
- 7. Ibid., p. 11. 8. Ibid., p. 15.
- 9. Ibid., p. 16.
- 10. Ibid., p. 1.

- 11. Ibid., p. 16.
- 12. Ibid., p. 17.
- 13. Ibid., p. 31.
- 14. Ibid., p. 31.
- Electronic Surveillance Project, Association of National Security Alumni, PO Box 13625, Silver Spring, Maryland, 20911-3625, USA.
- 16. 1992-93 figures provided in correspondence from the project director to the author. Current figures reported in writing to the author by the director of the International Association for the
- Convention Against Offensive Microwave Weapons, PO Box 58700, Philadelphia, PA 19102-8700, USA.

 17. Julianne McKinney, "Microwave Harassment & Mind-Control Experimentation" Report
- Mind-Control Experimentation", Report Supplement, November 1993 (with refs), Electronic Surveillance Project, Association of National Security Alumni, Silver Spring, Maryland, USA.
- 18. Correspondence from Julianne McKinney, Director of the Electronic Surveillance Project, Association of National Security Alumni, to Steven Metz, Ph.D., and LTC James Kievit, cc: Col. John W. Mountcastle, Director, Strategic Studies Institute,
- US Army War College, Carlisle Barracks, PA 17013-5050, USA, dated 8 January 1995.
- 20. See, for example, "New Warning System Near", The New York Times, 14 December 1994, p. A20.
- 21. Entire recipe for "RMA" in correspondence from Julianne McKinney, Director of the Electronic Surveillance Project, Association of National Security Alumni, to Steven Metz, Ph.D. and LTC James Kievit, op cit.
- 22. Metz and Kievit, op. cit., p. 33.